

TOUR REPORT

FIELD *WILD CAT*

CONTRACTOR

GP Drilling

RIG NO

141

WELL NAME

DRILLING DEEPENING COMPLETING

F. P. Poyne

SEC *I-13* TWP

Rgn W

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

MAY 2/71

19

SOBC

MUD and CHEMICAL

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	DP	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT		
SINGLE	DP	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT		
X-OVER SUB	OD		FT		FT		FT		FT		FT		
OTHER	OD		FT		FT		FT		FT		FT		
DRILL COLLARS	OD		FT		FT		FT		FT		FT		
DRILL COLLARS	OD	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT		
REAMER	OD	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT		
STARTER	OD	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT		
JAP		KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT		
BUMPER SUB		KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT		
BIT OR CORE BARREL			FT		FT		FT		FT		FT		
TOTAL DP & TOOLS			FT		FT		FT		FT		FT		
KELLY DOWN (BELOW R B)			FT		FT		FT		FT		FT		
DEPTH OF TOOLS			FT		FT		FT		FT		FT		

TOUR 1

TOUR 2

TOUR 3

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR		<i>8004</i>	FEET				FEET					FEET
DEPTH START OF TOUR			FEET				FEET					FEET
FOOTAGE DRILLED			FEET				FEET					FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	/											
ROTARY SPEED	/											
WEIGHT ON BIT	/											
MWD WEIGHT	/											
VISCOSITY	/											
W.L./F.C.	/											
p.H.	/											
MUD LEVEL IN TANKS	/											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	FHP	ps	FHP	ps	Time	AM	PM
FROM		ISI	mins	FHP	ps	FHP	ps	Mud Wt	lb/gal	lb/gal
TO		VO	mins	ISIP	ps	GTS	mins	V	W.P.C.	
Recovery		F.S.I	mins	F.S.I.P	ps	F.T.S	mins	A.V		
HOURS		RECOVERY								

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>T. HISSER</i>	<i>P. McRITTERICK</i>	<i>ARLO NAST</i>
DERRICKMAN	<i>PETERSON</i>	<i>Ed. GANGIMWIR</i>	<i>J. PHALEE</i>
HELPER	<i>EMMERTING</i>	<i>John Hogan</i>	<i>J. SCHENK</i>
HELPER	<i>OWRI</i>		<i>A. HLEX</i>
HELPER	<i>NYCHOLAT</i>	<i>D. McCollins</i>	<i>G. GARRETT</i>
FIREMAN			
TOOL PUSHER	<i>D. Ryenkamp</i>		

DEVIATION RECORD

Kind Depth Remarks

SOBC WM F Petroleum YT - I-13.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
19	Kind	Amount		
TOUR	TOUR 1	12:00	12:30	Run in Feet Plug # 3
FT		12:30	1:00	Hoist to 2800 @ 2000' Circ
FT		1:00	1:30	Mix Plug # 4
FT		1:30	2:30	Hoist 10 ⁰⁰ STANDS @ CIRC
FT		2:30	8:00	Lay D/118 SINGLES + 16 1/2" C
FT				
FT				
FT				
FT	TOUR 2	8:00	9:00	Run in Feet Plug # 4
FT		9:00	9:30	Hoist to 850
FT		9:30	10:30	Circ and Run Plug # 5
FT		10:30	11:00	Hoist very slow
FT		11:00	4:00	Lay down DRILL PIPE AND WAIT ON V.W. OK.
FT				
FT				
FT				
FT	TOUR 3	4:00		
FEET			7:00	W.C.C.
FEET		7:00	7:30	Run in Feet Plug # 5
FEET		7:30	13:00	Lay down PIPE @ 80' P. Mix 5 SHY CEMENT Plug 4 WELD ON CAP & SIGN

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Feet Plug # 3 @ 3500 * 9:30 AM

Run Plug # 4 2600' - 2450' with 100 S
C.I.P. 1:30 AM May 2/71

Feet Plug # 4 @ 9:00 AM May 2/71 @ 2430

Run Plug # 5 350 - 750 with 130 S + 3% CO₂
C.I.P. 10:30 AM May 2

Feet Plug # 5 @ 6:45 PM May 2 @ 715

TOUR REPORT

CONTRACTOR **GP** 14

FIELD **✓** WELL NAME **EAST BUCKWANE I-13** LSD **I-13** TWP **MAY 1** 19 **71**

DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO	FT	NO	FT	NO
SINGLE	D.P.	NO	FT	NO	FT	NO
X OVER SUB	O.D.		FT		FT	
OTHER	O.D.		FT		FT	
DRILL COLLARS	O.D.		FT		FT	
DRILL COLLARS	O.D.	NO	FT	NO	FT	NO
REAMER	O.D.	KIND	FT	KIND	FT	KIND
STABILIZER	O.D.	KIND	FT	KIND	FT	KIND
JARS		KIND	FT	KIND	FT	KIND
BUMPER SUB		KIND	FT	KIND	FT	KIND
BIT OR CORE BARREL			FT		FT	
TOTAL D.P. & TOOLS			FT		FT	
KELLY DOWN (BELOW R.B.)			FT		FT	
DEPTH OF TOOLS			FT		FT	

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		8004 FEET		8004 FEET		8004 FEET
DEPTH START OF TOUR		8004 FEET		8004 FEET		8004 FEET
FOOTAGE DRILLED		0 FEET		0 FEET		0 FEET

DAY WORK	40 HRS				40 HRS			
	2:30 AM	4:00 AM	6:30 AM	8:00 AM	8:30 AM	10:30 AM	1:00 PM	3:00 PM
PUMP	S.D.M. P.S.							
ROTARY SPEED	R.P.M.							
WEIGHT ON BIT	M. lbs.							
MUD WEIGHT	lb. gal.							
VISCOSITY	SP. GR.							
W.L.F.C.	C.C. 32nd							
p.H.								
MUD LEVEL IN TANKS	Ft. Ins.							

PLUGGING TO ABANDON

NO.	SIZE	SERIAL	BIT KIND AND TYPE	REMARKS
			NONE	

CORE No.	No.	DST No.	FROM	TO	RECOVERY	HOURS
			PREFLOW			
			FROM			
			TO			
			RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER	ED K...	A. NAST
DERRICKMAN	PETERSON	ED Lang...	J. PAHLEE
HELPER	EMMERLING	3/...	J. SCHENK
HELPER	ONEILL	Larry Shogren	A. ALEX
HELPER		...	G. GARRETT
FIREMAN			
TOOL PUSHER	D. Regunkamp		

TOUR REPORT

CONTRACTOR **GP** 14

FIELD DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING
 WELL NAME **EAST ROCKWANE I-13** TWP **MAY 1** 19 **71**

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR				
STANDS	D.P.	NO			FT	NO			FT	NO			FT
SINGLE	D.P.	NO			FT	NO			FT	NO			FT
X OVER SUB	O.D.				FT				FT				FT
OTHER	O.D.				FT				FT				FT
DRILL COLLARS	O.D.				FT				FT				FT
DRILL COLLARS	O.D.	NO			FT	NO			FT	NO			FT
REAMER	O.D.	KIND			FT	KIND			FT	KIND			FT
STABILIZER	O.D.	KIND			FT	KIND			FT	KIND			FT
JARS		KIND			FT	KIND			FT	KIND			FT
BUMPER SUB		KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL D.P. & TOOLS					FT				FT				FT
KELLY DOWN (BELOW R.B.)					FT				FT				FT
DEPTH OF TOOLS					FT				FT				FT

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
DEPTH END OF TOUR				8004 FEET				8204 FEET					8004 FEET
DEPTH START OF TOUR				8004 FEET				8004 FEET					8004 FEET
FOOTAGE DRILLED				0 FEET				0 FEET					0 FEET

DAY WORK	HOURS				HOURS				HOURS				
	2:30 AM	4:00 AM	6:30 AM	8:00 AM	8:00 AM	10:30 AM	12:00 PM	4:00 PM	6:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP	/												
ROTARY SPEED	/												
WEIGHT ON BIT	/												
MUD WEIGHT	/												
VISCOSITY	/												
W.L.F.C.	/												
p.H	/												
MUD LEVEL IN TANKS	/												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	REMARKS
			NONE	

CORE No.	No.	DST No.	FROM	TO	RECOVERY	HOURS

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER	ED K...	A. NAST
DERRICKMAN	PETERSON	ED Lang...	J. PAHLEE
HELPER	EMMERLING	3/...	J. SCHENK
HELPER	ONEIL	Larry Shogren	A. ALEX
HELPER		...	G. GARRETT
FIREMAN			
TOOL PUSHER	D. Regunkamp		

TOUR REPORT

CONTRACTOR **GP Drilling** RIG NO **14**

FIELD **WIDCAT** WELL NAME _____ LSD _____ SEC _____ TWP _____ Rpt _____ W _____
 DRILLING DEEPENING COMPLETING **E. Persene 1-13**
 REDRILLING ABANDONING REWORKING FGR 24 HOURS ENDING _____ MIDNIGHT **APR 29** 1977

3050
MUD and CHEMICALS
Kind _____

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	D P	NO	FT	NO 74	FT 7935	NO 84	FT 7935	NO 84	FT 7935	
SINGLE	D P	NO	FT	NO 1	FT 3176	NO 1	FT 3176	NO 1	FT 3176	
X-OVER SUB	O D		FT	XO	154		154		154	
OTHER	O D		FT	B.T. SUB	290		290		290	
DRILL COLLARS	O D		FT							
DRILL COLLARS	O D	NO	FT	NO 16	495	NO	FT		FT	
REAMER	O D	KIND	FT	KIND		KIND	FT	KIND	FT	
STABILIZER	O D	KIND	FT	KIND		KIND	FT	KIND	FT	
JARS	O D	KIND	FT	KIND		KIND	FT	KIND	FT	
BUMPER SUB	O D	KIND	FT	KIND		KIND	FT	KIND	FT	
BIT OR CORE BARREL			FT				FT		FT	
TOTAL D.P. & TOOLS			FT		7978		7971		7971	
KELLY DOWN (BELOW R.B.)			FT		3300		3300		3300	
DEPTH OF TOOLS			FT		8004		8004		8004	

TOUR 1
TOUR 2
Spersene
TOUR 3
SPEERSINE

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	
DEPTH END OF TOUR	8004	FEET	8004	FEET	8004	FEET	8004	FEET	8004	FEET	8004	FEET
DEPTH START OF TOUR	8004	FEET	8004	FEET	8004	FEET	8004	FEET	8004	FEET	8004	FEET
FOOTAGE DRILLED	0	FEET	0	FEET	0	FEET	0	FEET	0	FEET	0	FEET

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32"	TOOTH PROFILES	FROM	TO	REMARKS
32	3 3/4	23532	X55 L	None	2 3/4	TRYS	822A	109 4.3 1 2 1

DST # 8
CAN. W...
D.K. G...
P...
T...
V...
E...
M...
M...
O...
L...
M...
P...
M...
M...

CORE No.	No.	DST No.	FROM	TO	REMARKS
					APR 30

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER	P. M. Hittick	A. NAST
DERRICKMAN	PETERSON	K. LANGMIR	J. MARLEE
HELPER	K. MEXLING	FINLEY JUDSON	J. SCHENK
HELPER	CRUEL	D. M. COLLINS	A. MEX
HELPER	NYCHOLAT	Dave Hogen	G. GARRETT
FIREMAN			
TOOL PUSHER	D. Byenkamp		

APR 30
2:00
9.9-10.9
162
86
60
85
0.1
10/69
7.2
9.3
19.0
30/1950
M...
L...
P...
M...
M...

TOUR REPORT

CONTRACTOR **GP Drilling** RIG NO **14**

FIELD **WIDCAT** WELL NAME _____ LSD _____ SEC _____ TWP _____ Rpt _____ W _____
 DRILLING DEEPENING COMPLETING **E. Persene 1-13**
 REDRILLING ABANDONING REWORKING FGR 24 HOURS ENDING _____ MIDNIGHT **APR 29** 1977

3050
MUD and CHEMICALS
Kind _____

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D P	NO			FT	NO 74	7935	224	FT	NO 84	7935	224	FT
SINGLE	D P	NO			FT	NO 1	3176		FT	NO 1	3176		FT
X-OVER SUB	O D				FT	XO	154		FT		154		FT
OTHER	O D				FT	B.T. SUB	290		FT		290		FT
DRILL COLLARS	O D				FT				FT				FT
DRILL COLLARS	O D	NO			FT	NO 16	495		FT	NO			FT
REAMER	O D	KIND			FT	KIND			FT	KIND			FT
STABILIZER	O D	KIND			FT	KIND			FT	KIND			FT
JARS	O D	KIND			FT	KIND			FT	KIND			FT
BUMPER SUB	O D	KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL D.P. & TOOLS					FT		7978	724	FT		7971	44	FT
KELLY DOWN (BELOW R.B.)					FT		3300		FT		3300		FT
DEPTH OF TOOLS					FT		8004	44	FT		8004	44	FT

TOUR 1
TOUR 2
Spersene
TOUR 3
SPEERSINE

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS
DEPTH END OF TOUR		8004	FEET		8004	FEET		8004	FEET		8004	FEET
DEPTH START OF TOUR		8004	FEET		8004	FEET		8004	FEET		8004	FEET
FOOTAGE DRILLED		0	FEET		0	FEET		0	FEET		0	FEET

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32"	TOOTH PROFILES	FROM	TO	REMARKS
32	3 3/4	23532	X55 L	None	2 3/4	TRYS	822A	109 4.3 1 2 1

DST # 8
CAN. W...
D.K. G...
P...
T...
V...
E...
M...
M...
O...
L...
M...
P...
M...
L...
P...
M...
L...

CORE No.	No.	DST No.	FROM	TO	REMARKS
					APR 30

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER	P. M. Hittick	A. NAST
DERRICKMAN	PETERSON	K. LANGMIR	J. MARLEE
HELPER	K. MEXLING	FINLEY JUDSON	J. SCHENK
HELPER	CRUEL	D. M. COLLERS	A. MEX
HELPER	NYCHOLAT	Dave Hogen	G. GARRETT
FIREMAN			
TOOL PUSHER	D. Byenkamp		

APR 30
2:00
9.9-10.9
162
86
60
85
0.1
10/69
7.2
9.3
19.0
30/1950
M...
L...
P...
M...
L...

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WILCOX** WELL NAME **E-13** LSD **Becumbe** SEC **I-13** TWP R₁₄ W
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **Apr 28** 1971

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR				
STANDS	DP	NO SB	FT	NO 79	7461	12	FT	NO 25			FT
SINGLE	DP	NO 1	550949	FT			FT	NO			FT
X-OVER SUB	OD		154	FT		154	FT			154	FT
OTHER	OD			FT			FT				FT
DRILL COLLARS	7 OD	14	43504	FT	16DC	49504	FT	16	49504		FT
DRILL COLLARS	OD	NO		FT	NO		FT	NO			FT
REAMER	OD	KIND		FT	KIND		FT	KIND			FT
STABILIZER	OD	KIND		FT	KIND		FT	KIND			FT
JARS		KIND		FT	KIND		FT	KIND			FT
BUMPER SUB		KIND		FT	KIND		FT	KIND			FT
TEST TOOLS TO TOP INTERNAL BIT OR CORE BARREL			3957	FT			FT				FT
TOTAL D.P. & TOOLS			598464	FT		796370	FT				FT
KELLY DOWN (BELOW R.B.)	UP KB		250	FT		4030	FT				FT
DEPTH OF TOOLS			598214	FT		800400	FT				FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	8004 FEET	8004 FEET	8004 FEET
DEPTH START OF TOUR	8004 FEET		8004 FEET
FOOTAGE DRILLED	0 FEET		0 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:30 AM	8:00 AM	12:00 AM	2:00 PM	4:30 PM	6:00 PM	8:00 PM	10:30 PM	12:00 PM	
PUMP	/											
ROTARY SPEED	/											
WEIGHT ON BIT	/											
MUD WEIGHT	/											
VISCOSITY	/											
W.L.F.C.	/											
p.H	/											
MUD LEVEL IN TANKS	/											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN INCH	TOTAL HOURS	FROM	TO	REMARKS
38	8 3/4	23582	XSSR	HW	NONE	28 3/4	7395	8004
								109 4.3
								171
								DOWN TO 3000' TO COND. HOLE

CORE	No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT
TYPE			PREFLOW	mins	FHP	0.2
FROM			ISI	mins	FHP	10.4-12.7
TO			VO	mins	FHP	147
Recovery			FST	mins	FSTP	90 93
HOURS			RECOVERY			65 17.0

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	KUNSAK	P.M. Ketter	A. NAST
DERRICKMAN	PATYSON	Ed. LANGMUIR	J. PARLEE
HELPER	EMMELING	Ray Thompson	J. SCHENK
HELPER	O'Hair	D.M. Collins	R. HALEX
HELPER	NYCHOIAT		G. GARRETT
FIREMAN			
TOOL PUSHER			

MUD and CHEMICAL Kind
 TOUR 1
 TOUR 2
 TOUR 3
 DST #
 COLLARS
 TOUR 170

SOLC WH EAST Borehole YR 1-3

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:10	12:15	Run pack
		12:15	3:45	Run in w/ packer slip measurement
		3:45	4:10	Make up test
		4:10	4:30	Test
TOUR 2		9:00	9:30	Test
		7:30	10:00	RIG SERVICE TROPS MOTOR SHUT OFF
		10:00	10:00	RIG LIFTED BY THE BOARD
			3:30	HOISTING PACKER
		3:30	4:00	BREAK DOWN PACKER
TOUR 3		4:00	4:30	FINISH SLIP LINE
		4:30	4:45	RIG SERVICE
		4:45	6:15	RUN IN W/ BIT TO 3000' CLEAN OUT
		6:15	6:45	BREAK CIRC. HOLE TIGHT
		6:45	8:15	CIRC PRIOR TO TEST
		8:15	9:30	HOIST TO TEST
		9:30	11:30	MAKE UP TOOL
		11:30	12:00	RUN IN W/ TOOL

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

DST #7 5982-6062 STAINLESS STEEL
 PAN LINES UNITED SERVICES LTD. TEST TOOLS CO. 2210 1/2 ST. S. DENVER
 COLLARS AND ON 4 1/2" - 16.60" - FH DENVER

SET PACKERS ACROSS INTERVAL 5976-1054. WANNED TOOL, W. 3" HANNING TROPS AND IN TOOL.
 " " " " 5982-6062. VALVE WAS OPENED AT 4:48 AM
 FOR 3 MIN PERIOD, WAS SHUT IN AT 4:51 AM FOR 30 MIN PERIOD,
 WAS OPENED AT 5:23 AM FOR 120 MIN FLOW PERIOD. TOOL WAS SHUT
 IN AT 7:23 AM FOR 120 MIN FINAL SHUT IN. HANNING TROPS
 WAS RELEASED AT 7:23 AM AND PACKERS WERE LIFTED.

Received. GOOD AIR BLOW ON PERFORM.
 GOOD AIR BLOW ON F J RECEIVED.
 GAS TO SURFACE IN 10 MIN ON FLOW PERIOD AT INTERVAL 1054
 RATE OF 13 MGD DECID TO TSTM
 LOST NO ANNULAR FLUID.

Required: 190 GALS CUI HUD
 2320' SALT WATER (KW - 0.34 @ 68°F)
 Pressures: IHP 3892 PSI ISTM 347 PSI PRESSURE 1000 PSI
 FHP 308 PSI ISTM 274 PSI FHP AUG 347 PSI
 344 PSI 274 PSI IHP 1144 PSI

TEST MECHANICALLY SATISFACTORY. POUND LOSS OK. DANGER NO...
 Run in to 3000' TO COND. 12.6% HOISTED
 BEGAN DST #8

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Dwyer* SHEET *14*

FIELD *Wildcat* WELL NAME *E. Porcupine 120*

S.O.B.C. W.

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

April 27/71 19

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR						
	STANDS	DP	NO	STANDS	DP	NO	STANDS	DP	NO				
STANDS	DP	NO	<i>84</i>	<i>793524</i>	FT	NO	<i>84</i>	<i>793524</i>	FT	NO	<i>79</i>	<i>146712</i>	FT
SINGLE	DP	NO	<i>1</i>	<i>3176</i>	FT	NO	<i>1</i>	<i>3176</i>	FT	NO			FT
X OVER SUB	OD				FT				FT			<i>154</i>	FT
OTHER	OD				FT				FT				FT
DRILL COLLARS	OD				FT				FT				FT
DRILL COLLARS	OD	NO			FT	NO			FT	NO	<i>16</i>	<i>47504</i>	FT
REAMER	OD	KIND			FT	KIND			FT	KIND			FT
STABILIZER	OD	KIND			FT	KIND			FT	KIND			FT
JARS		KIND			FT	KIND			FT	KIND			FT
BUMPER SUB		KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL DP & TOOLS				<i>796700</i>	FT		<i>796700</i>	FT			<i>716370</i>	FT	
KELLY DOWN (BELOW B)				<i>3700</i>	FT		<i>3700</i>	FT			<i>40</i>	FT	
DEPTH OF TOOLS				<i>800400</i>	FT		<i>800400</i>	FT			<i>820370</i>	FT	
TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR						
DEPTH END OF TOUR				<i>8064</i>	FEET		<i>8004</i>	FEET					FEET
DEPTH START OF TOUR					FEET			FEET					FEET
FOOTAGE DRILLED					FEET			FEET					FEET

GEL ALUMINUM

SPEERSEN 4 ALUMINUM

SPEERSENE

DAY WORK	HOURS				HOURS				HOURS			
	1:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP	<i>400</i>	<i>400</i>	<i>400</i>	<i>400</i>					<i>800</i>			
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT	<i>10.4</i>	<i>10.6</i>	<i>10.7</i>	<i>10.7</i>					<i>9.9</i>	<i>7.9</i>		
VISCOSITY	<i>120</i>	<i>180</i>	<i>165</i>	<i>167</i>					<i>200</i>			
WLF C												
pH												
MUD LEVEL IN TANKS												

Note:

NO.	SIZE	SERIAL	BIT KIND AND TYPE	BIT SIZES (IN)	TOOTH PROFILES	FRUITS	REMARKS

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
	DRILLER	<i>G. Sodergren</i>	<i>TRASKER</i>
DERRICKMAN	<i>J. Frazier</i>	<i>J. Petersen</i>	<i>Ed. LANGMUIR</i>
HELPER	<i>L. Chornipaski</i>	<i>R. Erickson</i>	<i>J. Jundt</i>
HELPER	<i>G. Lewis</i>	<i>L. Videman</i>	<i>Mary Johnson</i>
HELPER	<i>M. Rine</i>	<i>O'NEAL</i>	<i>D. J. Collins</i>
FIREMAN			
TOOL PUSHER	<i>D. Rasmussen</i>		

ACTIVITY	START TIME	STOP TIME	REMARKS
Flowline - Suction	<i>10:00</i>	<i>10:17</i>	<i>71.65</i>
	<i>147</i>		<i>6.4</i>
	<i>90</i>		<i>7.3</i>
	<i>65</i>		<i>7.0</i>
	<i>50</i>		<i>6.0</i>

S.O.B.C. W.M. E. Porcupine 1-13. Y.T.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	12 ¹⁵	Rig Service. & BOR Give Hole Cond Mud.
GEL	1000	12 ¹⁵		
ALUMINUM	4			
TOUR 2		8 ⁰⁰	8 ¹⁵	Rig Ser Bops, Motor SHUT OFF, Shelly COCK, CROWN O MATIC, BRAKES. GIRG & COMP. MUD.
SPEARSELY	400	8 ¹⁵	11 ⁰⁰	
ALUMINUM	7			
WIEY 57 MAT	12000			
TOUR 3		4 ⁰⁰	6 ³⁰	COND GAS CUT MUD HUIST SLOW TO TEST MAKE UP PACKER
SPEARSELY	50	6 ³⁰	9 ³⁰	
		9 ³⁰	12 ⁰⁰	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

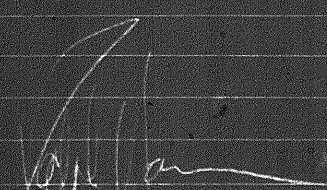
Note: AFTER DST # 6 Ran in to condition hole.
BEGAN CIRCULATING 11:30 AM April 26/71

BY 12:30 PM FOUND IT NECESSARY TO CIRCULATE THROUGH HOLE.
BEGAN USING FLOW METER AGAIN AT 4:45 PM April 26/71

CONTINUED CIRCULATING TO 6:30 PM April 27/71 RECORD 63551
MUD CLEANED UP ENOUGH TO HOIST.

PULLED OUT OF HOLE, BEGAN HANGING LINES UNTIL JOBS
INFLATABLE TOOLS FOR DST # 7

REPORT
0.2
Gel in Gel 7/65
F.C. 6.4
9.3
17.0
p.p.m. 60/500
RD
Reading


SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO. **14**

FIELD **WID CRT** WELL NAME **E PORCUPINE 1-13** LSD SEC TWP R4E W
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 26 / 1970**

MUD and CHEMICALS
Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR															
STANDS	D.P.	NO				NO 84	7	9	3	5	2	4	FT	NO 84	7	9	3	5	2	4	FT				
SINGLE	D.P.	NO				NO 1				3	1	7	6	FT	NO 1				3	1	7	6	FT		
X OVER SUB	O.D.												FT										FT		
OTHER	O.D.												FT										FT		
DRILL COLLARS	O.D.												FT										FT		
DRILL COLLARS	O.D.	NO				NO							FT	NO									FT		
REAMER	O.C.	KIND				KIND							FT	KIND									FT		
STABILIZER	O.D.	KIND				KIND							FT	KIND									FT		
JARS		KIND				KIND							FT	KIND									FT		
BUMPER SUB		KIND				KIND							FT	KIND									FT		
BIT OR CORE BARREL													FT										FT		
TOTAL D.P. & TOOLS										7	9	6	9	0.0	FT					7	9	6	9	0.0	FT
KELLY DOWN (BELOW R.B.)													FT										FT		
DEPTH OF TOOLS										8	0	0	4	0.0	FT					8	0	0	4	0.0	FT

TOUR 1

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR														
DEPTH END OF TOUR																							
DEPTH START OF TOUR																							
FOOTAGE DRILLED																							

TOUR 2

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												50 900
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT									10.7	10.5	10.4	10.4
VISCOSITY									110	85	240	
W.L.F.C.									6.6			
p.H.									10.2			
MUD LEVEL IN TANKS												

TOUR 3
Gal.
Caustic
SPERIENCE
W. weight
ALUMINUM

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32"	TOTAL HOURS	FROM	TO	REMARKS	CONDITION

DST #6

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	I.H.P.	as	I.F.P.	as	Time	Pressure	Remarks
FROM		I.S.I.	mins	F.H.P.	as	I.F.P.	as	Time	Pressure	Remarks
TO		V.O.	mins	I.S.I.P.	as	G.T.S.	mins	Time	Pressure	Remarks
Recovery		F.S.I.	mins	F.S.I.P.	as	F.T.S.	mins	Time	Pressure	Remarks
HOURS		RECOVERY								

Flow 1
on 4
sums
25
20

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>FRISER</i>	<i>...</i>	<i>Ed. Langman</i>
DERRICKMAN	<i>...</i>	<i>...</i>	<i>N. Collins</i>
HELPER	<i>...</i>	<i>...</i>	<i>Ray Hopewell</i>
HELPER	<i>...</i>	<i>...</i>	
HELPER	<i>...</i>	<i>...</i>	
TREMAN			
COOL PUSHER			

TOUR REPORT

CONTRACTOR

G.P. Drilling Co. RIG NO

141

SOBC

WELL NAME *Wild Cat*

LSD

SEC

FWP

Rup

W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

E. 1st Street 1-73

APRIL 25/71

19

MUD and CHEMICALS AD

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR									
STANDS	DP NO	7	4	6	7	1	2	7	4	3	5	3	6	7	4	3	5	3	6
SINGLE	DP NO																		
OVER SUB	OD																		
OTHER	OD																		
DRILL COLLARS	OD																		
DRILL COLLARS	OD NO																		
BEAMER	OD KIND																		
STABILIZER	OD KIND																		
WARS	KIND																		
BUMPER SUB	KIND																		
BIT OR CORE BARREL	FT																		
TOTAL DP & TOOLS	FT																		
PIPE ABOVE	FT																		
PIPE DOWN BELOW R.B.J.	FT																		
DEPTH OF TOOLS	FT																		

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	8004 FEET	8004 FEET	8004 FEET
DEPTH START OF TOUR			
FOOTAGE DRILLED			

DAY WORK	HOURS											
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP												
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.												
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REASON

NO	No	DST No	FROM	TO	MUD ENGINEER'S REPORT
TYPE			PREFLOW	mins	IHP
ROM			ISI	mins	FHP
VO			VO	mins	FHP
Recovery			FST	mins	FHP
HOURS			RECOVERY		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>F. FRASKER</i>	<i>G. Sodergren</i>	<i>P.M. KILMICK</i>
FERRICKMAN	<i>F. FRASKER</i>	<i>J. Pedersen</i>	<i>E. LANGMARR</i>
HELPER	<i>ONIAI</i>	<i>R. Emmertling</i>	<i>D. J. Collins</i>
HELPER	<i>LEWIS</i>	<i>L. Mychelaz</i>	<i>Ray Hooper</i>
HELPER	<i>RINK</i>	<i>L. Chernipezki</i>	
IREMAN			
COOL PUSHER	<i>D. Legendre</i>		

TOUR 1

TOUR 2

TOUR 3

INCLINING

1-73

APR 25 1971

SOBC

SOBC WM K. Porcupine YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
19	Kind	Amount		
TOUR	TOUR 1			
36 FT		12 ⁰⁰	12 ³⁰	Rig out SEMHUMBUCK.
FT		12 ³⁰	12 ⁴⁵	Rig SERVICE
54 FT		12 ⁴⁵	2 ⁴⁵	Make up TEST RUN IN D.C.
FT		2 ⁴⁵	4 ⁰⁰	Slip & Cut D/LINE
04 FT		4 ⁰⁰	6 ³⁰	RUN IN SLOW
FT		6 ³⁰	7 ¹⁵	HEAD UP TEST
FT		7 ¹⁵	8 ⁰⁰	TESTING
FT	TOUR 2			
FT		8 ⁰⁰	11 ¹⁵	Testing.
FT		11 ¹⁵	11 ⁴⁵	Rig Service.
FT		11 ⁴⁵	3 ⁰⁰	Hoisting Packer
FT		3 ⁰⁰	4 ⁰⁰	Break Down Packer.
63 FT				
57 FT				
54 FT				
03 FT	TOUR 3			
FT		4 ⁰⁰	5 ⁰⁰	BREAK DOWN PACKER
FT		5 ⁰⁰		RUN IN 57 STAGE (SINGLE)
FT			11 ¹⁵	MAKE UP PACKER RUN IN SLOW
FT		11 ¹⁵	12 ⁰⁰	HEAD UP PACKER
FT				TESTING

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

SCHUMBERGER

DST #5 7300 - 3000 DWA

LAN T.G. EHSILAND TEST 56 TUBS ON 343
 HWD ON 1 1/2" - 16.60 # ...
 INCLUDING 5 D.C.S. AND 43' ...
 AM FOR 3 MIN ...
 AT 7:45 AM FOR 90 MIN ...
 130 MIN ...

Report
 ...
 ...
 ...

Residuals: ...
 ...

Residuals: ...
 ...

...
 ...

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP Drilling** NO. **14**

FIELD **WIND CAT** WELL NAME _____ LSE _____ SEC **1-13** TWP _____ R. **24** W _____
 DRILLING DEEPENING COMPLETING **F. Pedersen**
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 23/19** 19

SOBC
MUD CHEMICAL Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS D.P. NO 79	746712 FT	NO 79	746712 FT
SINGLE D.P. NO		NO	
X OVER SUB O.D.	154 FT		154 FT
OTHER O.D.			
DRILL COLLARS O.D.	49504 FT		49504 FT
DRILL COLLARS O.D. NO KIND		NO KIND	
REAMER O.D. KIND		KIND	
STABILIZER O.D. KIND		KIND	
JARS O.D. KIND		KIND	
BUMPER SUB O.D. KIND		KIND	
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	796370 FT		796370 FT
KELLY DOWN (BELOW R.B.)	4000 FT		4000 FT
DEPTH OF TOOLS	800370 FT		800370 FT

TOUR 1
Gravel #
ALCOHOL
MAGCO 418
MATERIAL

LOGGING

TOUR 2
Caustic
Alcohol
Spersen

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	8004 FEET		8004 FEET
DEPTH START OF TOUR	8004 FEET		
FOOTAGE DRILLED	0 FEET		

TOUR 3

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.	
PUMP spm (psi)	59/700	59/700	59/700	59/700	59/700							
ROTARY SPEED RPM					187							
WEIGHT ON BIT M lbs												
MUD WEIGHT lb/gal	9.6	9.7	9.8	10.4	10.4							
VISCOSITY sec at	143	157	205	198	187							
W.L.F.C. cc/32nd												
pH												
MUD LEVEL IN TANKS Ft Ins												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL FEET	FROM	TO
32	8 3/4	23582	V 25 K	1/8	7134	7134	7134

CORE No.	No.	DST No.	FROM	TO	RECOVERY

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRISEK	G. Sodergren	P.H.K. Torsvik
DERRICKMAN	FRISEK	J. Pedersen	Ed LANGMUIR
HELPER	Mark	R. Emmerting	J. Jansen
HELPER	Lewis	L. Nyholst	L.M. Collins
HELPER	Rink	L. Chernopastki	Gary Hopson
FIREMAN			
TOOL PUSHER	D. Sigurdson		

SOBC WM E. PORCUPINE YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
19	Kind	Amount		
TOUR	TOUR 1		12 ⁰⁰	4 ⁰⁰ Core + Cond. Mud.
12 FT	GEL #	2500		
FT	ALCOHOL #	10		
54 FT	MATERIAL #	30000		
04 FT				
FT	TOUR 2		8 ⁰⁰	12 ¹⁵ Core Hole Cond Mud.
FT	Caustic	100	12 ¹⁵	3 ⁰⁰ Hoist To Log.
FT	Alcohol	5 ⁰⁰	3 ⁰⁰	4 ⁰⁰ Rig up Loggers + Logging.
FT	Spersen	100		
70 FT				
00 FT				
70 FT	TOUR 3		4 ⁰⁰	12 ⁰⁰ Logging + ANL cutting core
UR				
FEET				
FEET				
FEET				
HOURS				
12:00 P.M.				

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

Fusion Cement 2000 4000

Loss 2000 3000 4000 5000 6000

Line # 703 - 703

Line # 704 - 704

Discussion 2000 4000 6000

REPORT

0.2
1.0
3.2
7.2
15.5
0.0
0.0

D

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO *14*

SOBC

FIELD *WID CAT* WELL NAME *LSD SEC TWP* *R. POCUPINE 1-13*
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *APR 1 22 1971* 19

MUD and CHEMICALS Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR									
STANDS	DP	NO 79	74	67	12	FT	NO 79	74	67	12	FT	NO 79	74	67	12	FT	
SINGLE	DP	NO.				FT					FT					FT	
X-OVER SUB	OD				154	FT				154	FT				154	FT	
OTHER	OD					FT					FT					FT	
DRILL COLLARS	OD				495	04	FT			495	04	FT			495	04	FT
DRILL COLLARS	OD	NO.				FT	NO				FT	NO				FT	
REAMER	OD	KIND				FT	KIND				FT	KIND				FT	
STABILIZER	OD	KIND				FT	KIND				FT	KIND				FT	
JARS		KIND				FT	KIND				FT	KIND				FT	
BUMPER SUB		KIND				FT	KIND				FT	KIND				FT	
BIT OR CORE BARREL						FT					FT					FT	
TOTAL DP & TOOLS					7963	70	FT			7963	70	FT			7963	70	FT
KELLY DOWN (BELOW R.B.)					4000	FT				4000	FT				4000	FT	
DEPTH OF TOOLS					8003	70	FT			8003	70	FT			8003	70	FT

TOUR 1
CAUSTIC SPERSENE ALUMINUM

TOUR		MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR			8004	FEET		8004	FEET		8004	FEET
DEPTH START OF TOUR			8004	FEET		8004	FEET		8004	FEET
FOOTAGE DRILLED			0	FEET		0	FEET		0	FEET

TOUR 2
CAUSTIC SPERSENE

DAY WORK		HOURS			HOURS			HOURS					
PUMP	s.p.m. p.s.i.	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
ROTARY SPEED	R.P.M.		57	59				50	59	59	59	59	
WEIGHT ON BIT	M lbs												
MUD WEIGHT	lb/gal			9.5	9.0	Return To Shaker Box		7.1	4.4	7.4	9.4	9.4	
VISCOSITY	sec/qt			240				92	110	122	128	130	
W.L./F.C.	c.c./32nd									6.2	2/2	9.0	

TOUR 3
ALCOHOL GEL ALUMINUM

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO
32	8 3/4	23582	X55R	RR	None	7:30	5:00

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>FRASEX</i>	<i>G. Sadengren.</i>	<i>P.M. K. T. ...</i>
DERRICKMAN	<i>FRASEX</i>	<i>J. Pedersen.</i>	<i>Ed. LANGMUIR</i>
HELPER	<i>O NEAL</i>	<i>R. Emmerling.</i>	<i>J. ...</i>
HELPER	<i>LEWIS</i>	<i>L. Nyholat.</i>	<i>F. ...</i>
HELPER	<i>RINE</i>	<i>L. Chernipekii.</i>	<i>D. McCollen</i>

MUD AND CHEMICALS REPORT
 Type *8.2* ...
 FROM *7.0* ...
 TO *1.5* ...
 Recovery *51* ...
 HOURS *23*

TOUR REPORT

CONTRACTOR **G.P. Drilling** RIG NO. **14**

FIELD **Wildcat** WELL NAME **K. Porcupine** LSD SEC TWP Rgr W
 DRILLING DEEPENING COMPLETING **1-13**
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 22/71** 1971

50 BC
MUD and CHEM Kind

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS .. D.P.	NO 79	746712	FT	NO 79	746712	FT	NO 79	746712	FT
SINGLE .. D.P.	NO.		FT	NO.		FT	NO.		FT
X-OVER SUB .. O.D.		154	FT		154	FT		154	FT
OTHER .. O.D.			FT			FT			FT
DRILL COLLARS .. O.D.		49504	FT		49504	FT		49504	FT
DRILL COLLARS .. O.D.	NO.		FT	NO.		FT	NO.		FT
REAMER .. O.D.	KIND		FT	KIND		FT	KIND		FT
STABILIZER .. O.D.	KIND		FT	KIND		FT	KIND		FT
JARS .. O.D.	KIND		FT	KIND		FT	KIND		FT
BUMPER SUB.	KIND		FT	KIND		FT	KIND		FT
BIT OR CORE BARREL			FT			FT			FT
TOTAL D.P. & TOOLS		796370	FT		796370	FT		796370	FT
KELLY DOWN (BELOW R.B.)		4000	FT		4000	FT		4000	FT
DEPTH OF TOOLS		800370	FT		800370	FT		800370	FT

TOUR 1
FERTILIZER
SPER'S END
ALUMINUM

TOUR 2

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	8004 FEET	8004 FEET	8004 FEET
DEPTH START OF TOUR	8004 FEET		
FOOTAGE DRILLED	0 FEET	0 FEET	0 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	s.p.m. 59	p.s.i. 680	59	650								
ROTARY SPEED	R.P.M.											
WEIGHT ON BIT	M lbs.											
MUD WEIGHT	lb/gal	9.2	9.6									
VISCOSITY	sec/qt	350	205									
W.L.F.C.	cc 32nd											
PH												
MUD LEVEL IN TANKS	Ft-ins											

DST # 4 S

16.024

15000

MUD ENGINEER'S REPORT

Time 3:30

Mud Wt 9.6

Visc 205

AV 70

SD 40

0.2

12/35

6.2

7.0

13

20/80

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET HR	BIT CONDITION
32	8 3/4	23582	X 55X	R.R	None	7895	305	25.9	17.5

CORE No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT
TYPE		PREFLOW	mins	F.H.P	mins
FROM		ISI	mins	F.H.P	mins
TO		VO	mins	ISIP	mins
Recovery		FSI	mins	FSIP	mins
HOURS		RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER	G. Sodergren	P. McKittrick
DERRICKMAN	FRASER	J. Pedersen	Ed. LANGMUIR
HELPER	LEWIS	R. Emmending	F. Jepsen
HELPER	RINE	L. Nychalat	R. Progre
HELPER		L. Chernipeski	D.M. Collins
FIREMAN			
TOOL PUSHER	D. Jankamp		

TOUR REPORT

CONTRACTOR *GENERAL BUCKLEUP* RIG NO. *14*

FIELD *WILCOAT* WELL NAME _____ LSD _____ SEC _____ TWP _____
 DRILLING DEEPENING COMPLETING *EAST BUCKLEUP T-13*
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT _____ 19

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS .. D.P.	NO.			FT	NO.			FT	NO.			FT
SINGLE .. D.P.	NO.			FT	NO.			FT	NO.			FT
X-OVER SUB .. O.D.				FT				FT				FT
OTHER .. O.D.				FT				FT				FT
DRILL COLLARS .. O.D.				FT				FT				FT
DRILL COLLARS .. O.D.	NO.			FT	NO.			FT	NO.			FT
REAMER .. O.D.	KIND			FT	KIND			FT	KIND			FT
STABILIZER .. O.D.	KIND			FT	KIND			FT	KIND			FT
JARS	KIND			FT	KIND			FT	KIND			FT
BUMPER SUB	KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL				FT				FT				FT
TOTAL D.P. & TOOLS				FT				FT				FT
KELLY DOWN (BELOW R.B.)				FT				FT				FT
DEPTH OF TOOLS				FT				FT				FT

LOGGING

LOGGING

LOGGING

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR			8004	FEET			8004	FEET			8004	FEET
DEPTH START OF TOUR				FEET				FEET				FEET
FOOTAGE DRILLED				FEET				FEET				FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP S.P.M. P.S.I.	/											
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs.												
MUD WEIGHT lb/gal												
VISCOSITY sec/qt												
W.L.F.C. c.c./32nd	/											
p.H.												
MUD LEVEL IN TANKS Ft.-ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	DEPTH	REF. CONDITIONS
32	8 3/4	23582	HW VSS C	3-10	22 3/4	7895	8004	109	4.3 1-3-7

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
TYPE		PREFLOW	mins. I.F.P.	mins. F.F.P.	Time	Vis	Mud Wt	AV
FROM		I.S.I	mins. F.F.P.	mins. I.S.I.P.	Time	Vis	Mud Wt	AV
TO		V.O.	mins. I.S.I.P.	mins. F.F.P.	Time	Vis	Mud Wt	AV
Recovery		F.S.I	mins. F.F.P.	mins. F.F.P.	Time	Vis	Mud Wt	AV
HOURS		RECOVERY			Time	Vis	Mud Wt	AV

NONE TO BE TAKEN

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	<i>A. NAST</i>	<i>FURSEK</i>	<i>G. Sadargren</i>	Kind	Depth	Reading
DERRICKMAN	<i>J. PARLEE</i>	<i>FURSEK</i>	<i>J. Pedersen</i>			
HELPER	<i>SCHENK</i>	<i>SCHENK</i>	<i>R. Emmerling</i>			
HELPER	<i>H. Hux</i>	<i>KINE</i>	<i>L. Nycholat.</i>			
HELPER	<i>G. GARRETT</i>	<i>LEWIS</i>	<i>L. Chernipecki</i>			
FIREMAN						
TOOL PUSHER						

MUD and CHEMICALS Kind

TOUR 1

TOUR 2

TOUR 3

Handwritten notes and signatures on the right margin, including names like "SADARGREN" and "PEDERSEN".

SOBC WM EAST BUCKPINE TT 1-13

OTHER HOURLY OPERATING DETAIL
WORK DONE

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount	12 ⁰⁰	8 ⁰⁰	
TOUR 1				LOGGING
FT				
FT				
FT				
FT				
FT				
FT				
TOUR 2		8 ⁰⁰	1 ⁰⁰	LOGGING
FT				
FT				
FT				
FT				
FT				
FT				
TOUR 3		4 ⁰⁰ 8 ⁰⁰	10 ⁰⁰ 12 ⁰⁰	Logging. Run In To Clean Out Hole. Loggers Hit Bridge At Approx 5600. Filled Pipe At 5000 & 7000. Tagged Bottom No Fill.
FEET				
FEET				
FEET				
HOURS				
P.M.	12:00 P.M.			

CEMENTING TESTING FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

SCUMBERGEE TAGGED BOTTOM AT 8003 --- LOGGED NO FLOWS:

LOG	TIME COMPLETE	INITIAL	SCALE	REMARKS
BHC/Sonic/GR.C	1:30 AM	8001-797	2'-5"	SATISFACTORY
DUP INV. INTERLOG	3:30 AM	7998-797	2'-5"	NOT ACCURATE
FIX/EN/GRAND	4:30 AM			NOT ACCURATE
SNIP/EN/GRAND	7:30 AM	7998-5800	5' MIN	SATISFACTORY
		4000' - 3000'	POSITION ON INTERLOG SCALE	
SHOWN CORES	11:30 AM	SEE BELOW		RECORDED AS OF 06
DUP INV INTERLOG	1:30 PM	7998-797	2'-5"	SATISFACTORY
FIX/EN/GRAND	4:22 AM	7998-5800	5' MIN	SATISFACTORY
		4000' - 3000'	POSITION ON INTERLOG SCALE	

CORE SUCCESSFUL RUN IN AT 5600' APPROX.

SHOWN CORES: 13000' SONIC 7998, 100' SONIC 1052.

After circulating with logs at 5650, began down SCUMBERGEE. With log at 5000, failed no change. No fill.

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO *14*

SOBC

FIELD *WILDCAT* WELL NAME

LSD SEC TWP Rgn W

DRILLING DEEPENING COMPLETING *EAST PORCUPINE 1-13*
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *APRIL 20/91* 19

MUD and CHEM Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	DP	NO	79	746712	FT	NO	79	746712	FT	NO	79	746712	FT
SINGLE	DP	NO			FT	NO			FT	NO			FT
X-OVER SUB	OD			154	FT			154	FT			154	FT
OTHER	OD				FT				FT				FT
DRILL COLLARS	7 OD	16	49504		FT		49504		FT		49504		FT
DRILL COLLARS	OD	NO			FT	NO			FT	NO			FT
REAMER	OD	KIND			FT	KIND			FT	KIND			FT
STABILIZER	OD	KIND			FT	KIND			FT	KIND			FT
JARS		KIND			FT	KIND			FT	KIND			FT
BUMPER SUB		KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL DP & TOOLS			796370		FT		796370		FT		796370		FT
KELLY DOWN (BELOW RB)			4000		FT		4000		FT		4000		FT
DEPTH OF TOOLS			800370		FT		800370		FT		800370		FT

ALUMINUM
SMALL STRAIN
WATER

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	8004 FEET	8004 FEET	8004 FEET
DEPTH START OF TOUR	8004 FEET		
FOOTAGE DRILLED	0 FEET	0 FEET	0 FEET

TOUR 2
ALUMINUM
SPERESIN

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	59 330	59 330	59 330	600						52 330		
ROTARY SPEED					T		L					
WEIGHT ON BIT					R		0					
MUD WEIGHT	9.6	9.6	9.6	9.6			6			9.5		
VISCOSITY					P					300		
W.L.F.C.												
p.H												
MUD LEVEL IN TANKS												

TOUR 3
ALUMINUM
SPERESIN

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS	BIT CONDITION
32	8 3/4	23533	X 55 K	R.K	NEW	7:45	10:45		

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREF LOW	mins	FHP	ps	Time	7:45	10:45	
FROM		ISI	mins	FHP	ps	FHP	ps	Mud Wt	9.6
TO		VO	mins	ISIP	ps	GTS	mins	Vis	300
Recovery		FSI	mins	FSTP	ps	FSTP	mins	AV	747
HOURS		RECOVERY			ps	FSTP	mins	PH	7.7

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	<i>T. RASER</i>	<i>G. Sodergren</i>	<i>P. M. Kittenick</i>	Kind	Depth	Reading
DERRICKMAN	<i>T. RASER</i>	<i>J. Pedersen</i>	<i>Ed LANGMUIR</i>			
HELPER	<i>LEWIS</i>	<i>R. Emmerling</i>	<i>Jordan</i>			
HELPER	<i>RINK</i>	<i>L. Nyeholm</i>	<i>J. H. J. L.</i>			
HELPER	<i>SHOOREN</i>	<i>L. Chernipaski</i>	<i>R. M. Collins</i>			
FIREMAN						
TOOL PUSHER	<i>D. Dyckhoff</i>					

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO **14**

FIELD **WILDCAT** WELL NAME **E. PORCUPINE 113D**

SEC TWP Rpt W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 19**

1971

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS 4 1/2 DP	NO	746712 FT	NO	746712 FT	NO	746343 FT
SINGLE DP	NO.		NO		NO	
X-OVER SUB OD		154 FT		154 FT		154 FT
OTHER OD						
DRILL COLLARS 7 OD	16	49504 FT		49504 FT		49504 FT
DRILL COLLARS OD	NO		NO		NO	
REAMER OD	KIND		KIND		KIND	
STABILIZER OD	KIND		KIND		KIND	
JARS	KIND		KIND		KIND	
BUMPER SUB	KIND		KIND		KIND	
BIT OR CORE BARREL						
TOTAL DP & TOOLS		796370 FT		796370 FT		796001 FT
KELLY DOWN (BELOW R B)		4100 FT		4100 FT		4000 FT
DEPTH OF TOOLS		800470 FT		800470 FT		800001 FT
TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		8004 FEET		8004 FEET		8000 FEET
DEPTH START OF TOUR		7960 FEET		8004 FEET		
FOOTAGE DRILLED		44 FEET		0 FEET		0 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP sp m p.s.i.	52	54	54	54	53	53						
ROTARY SPEED RPM	45	50	50	50								
WEIGHT ON BIT M lbs.	40	40	40	40								
MUD WEIGHT lb/gal	9.2	7.2	9.1	9.3	9.6	9.7						
VISCOSITY sec qt	98	95	100	192	160	162						
W L F C. cc/32nd	6.5	6.5	6.5	6.5								
pH	9.5	9.5	9.5	9.5	8.0							
MUD LEVEL IN TANKS Ft. Ins												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
32	8 3/4	23582	H.W. X55R	3-10	22 3/4	7895	8004	109	43 Good.

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT:				
TYPE		PRE W	mins	IHP	psf	IEP	psf	Time 3:00 PM	Air 2.75
FROM		ISI	mins	FHP	psf	EEP	psf	Mud Wt 9.3	Int. Gr. 5/10
TO		VO	mins	ISIP	psf	GTS	mins	Visc 182	W L F C 6.1
Recovery		FSI	mins	FSIP	psf	FTS	mins	A.V. 62.5	PH 9.3
HOURS		RECOVERY						P.V. 4	Temp 12

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	A. NAST	KRASK.	C. Sodergran.	Kind	Depth	Reading
DERRICKMAN	J. PARLEE	KRASK.	J. Pedersen.	DROPPED	3004	5
HELPER	J. SCHENK	SCHENK	R. Emmerling.			
HELPER	A. NLEX	KINE	L. Nycholab.			
HELPER	G. GARRETT	LEWIS	L. Chern. psk.			
FIREMAN						
TOOL PUSHER						

SOL
CHEM
Kind
TOUR 1
GEL SPERSENE
TOUR 2
ALUMINUM SILICATE

MEASURED

SOBC W.M. E. PORCUPINE 1-13

1971		MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
TOUR	Kind	Amount				
43 FT.				12 ⁰⁰	2 ⁵⁰	DRAINING
FT.				2 ⁰⁰	2 ¹⁵	RIG SERVICE
54 FT.	GEL	2500#		2 ¹⁵	7 ³⁰	DRILLING
FT.	SPEKSENE	100#		7 ³⁰	8 ⁰⁰	CIRC TO LOG
04 FT.						
FT.				8 ⁰⁰	8 ³⁰	CIRC TO LOG
FT.				8 ³⁰	11 ⁰⁰	HOIST 34 STANDS Run in Slow 4' Fill
FT.				11 ⁰⁰	11 ¹⁵	Rig S&S, Check B.O.P's
FT.	ALUMINUM	20#		11 ¹⁵	3 ⁰⁰	CIRC TO LOG
FT.	SICARATE			3 ⁰⁰	3 ³⁰	SURVEY AT 800H
FT.				3 ³⁰	4 ⁰⁰	HOIST TO LOG
001 FT.						
000 FT.						
001 FT.						
TOUR						
FEET				4 ⁰⁰	8 ⁰⁰	Hoisting To Log.
FEET						Very Slow As To Not Hurt
FEET						Wall of Hole.
HOURS				8 ⁰⁰	12 ⁰⁰	Logging.
M. 12 00 P.M.						

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MEASURED OUT: (PIPE ONLY)
 BOARD 7467 12
 SLM 7463 43
 DIFF 3.64 (CORRECTION NOT MADE)

RIGGED UP SCHWABELIGER TO LOG. COMMENCED LOGGING.

DETAILS ON NEXT REPORT.

REPORT
 0.35
 n. Gel 5/19
 c. 6.1
 9.8
 12
 p.p.m. 71/500

RD
 Reading
 5

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G. P. DRILLING RIG NO 14**

FIELD **WILDCAT** WELL NAME **E. BOACOPINE 1-13-50** SEC TWP Rgn W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 18** 19**71**

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS 4 1/2 D.P.	NO				NO 78				NO 79			
SINGLE D.P.	NO				NO 1				NO 2			
X-OVER SUB O.D.				154 FT				154 FT				154 FT
OTHER O.D.												
DRILL COLLARS 7 O.D.	16			49504 FT				49504 FT				49504 FT
DRILL COLLARS O.D.	NO				NO				NO			
REAMER O.D.	KIND				KIND				KIND			
STABILIZER O.D.	KIND				KIND				KIND			
JARS	KIND				KIND				KIND			
BUMPER SUB	KIND				KIND				KIND			
BIT OR CORE BARREL												
TOTAL D.P. & TOOLS				786886 FT				790056 FT				793202 FT
KELLY DOWN (BELOW R.B.)				2700 FT				1600 FT				774000 FT
DEPTH OF TOOLS				789586 FT				792656 FT				796002 FT

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
DEPTH END OF TOUR													
DEPTH START OF TOUR				7895 FEET				7895 FEET				7926 FEET	
FOOTAGE DRILLED								31 FEET				34 FEET	

DAY WORK	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.				5 1/2	5 1/2	5 1/2	5 1/2	5 1/2				
ROTARY SPEED R.P.M.				40	40	40	40	40	80	50	85	40
WEIGHT ON BIT M lbs				30	30	40	40	42	40	40	40	40
MUD WEIGHT lb.gal				9.5	9.7	9.5	9.6	9.6	9.6	9.6	9.6	9.6
VISCOSITY sec.cst				105	100	102	100	115	115	116	120	120
W.L.F.C. c.c./32nd							62					60
p.H.							9.0					9.0
MUD LEVEL IN TANKS Ft.-In.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	DEPTH	BIT CONDITION
32	8 3/4	23582	H.W. X55R	5-12	15 1/2	7895	7926	65-66	6

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
TYPE		PREFLOW	mins	I.H.P.	DS	FFP	DS	Time 3:15 AM
FROM		ISI	mins	F.H.P.	DS	FFP	DS	Mud Wt 9.6 10 Min. 9.20
TO		VO	mins	ISIP	DS	CTS	mins	Visc 105 W.L.F.C. 60
Recovery		FSI	mins	FSIP	DS	FTS	mins	A.V. 33 pH 9.1
HOURS		RECOVERY						P.V. 37 12

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	A. NAST	THORNTON	G. Soderstrom	
DERRICKMAN	J. PARLEE	FRANK	J. Pedersen	7895 5 1/4
HELPER	J. SCHENK	M. Schenk	R. Emmerling	
HELPER	A. ALEX	Frank	L. Nicholas	
HELPER	G. GARRETT	G. Lewis	L. Chernopostko	
FIREMAN				
TOOL PUSHER				

508
TO R 1
TO R 2
TO R 3
Spensens
Caustic
Steaming
In all streets
W.A.T.A.

SORC WM E PORCUPINE 1-13

OTHER HOURLY OPERATING DETAIL WORK DONE

MUD and CHEMICALS ADDED		From	To	
Kind	Amount			
TOUR 1		12 ⁰⁸	3 ¹¹	DRILLING
CAUSTIC	50#	3 ¹¹	3 ³⁰	RIG SERVICE
		3 ³⁰	8 ⁰⁰	DRILLING
TOUR 2		8 ⁰⁰	9 ³⁰	DRILLING
		9 ³⁰	1 ⁰⁰	Rig Serv. Take Down STAND pipe, Put new
		1 ⁰⁰	2 ⁰⁰	TRUCKS, BIT EACH UP
				DRILLING
TOUR 3		4 ⁰⁰	4 ²⁰	Rig Service Ch. B.O.P. Rig Savers.
Caustic	50#	4 ²⁰	12 ⁰⁰	Drig.
Gel	300#			
CMC	100#			
Disinfectant	15#			

CEMENTING TESTING FISHING SPECIAL LOGS DETAILS INCLUDING ENGINEERING COMMENTS

Kind	#	Wgt TONS	WGT LBS
NEAR BIT	9049	—	71 ^{1/2}
NEAR BIT	9830	—	186 ^{1/2}
NEAR BIT	9027	19 ^{1/2}	488 ^{1/2}
SLIDE	45B	19 ^{1/2}	523 ^{1/2}
SLIDE	451	19 ^{1/2}	542 ^{1/2}
CUSHION	9028	—	345 ^{3/8}
D.C.	51124	—	198 ^{1/2}
D.C.	66454	—	194 ^{1/2}

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRUG.**

RIG NO **14**

FIELD **WILDCAT** WELL NAME **E. PORCUPINE H-10LSD**

SEC

TWP

Rge

W

SDBC

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

APRIL 15 1971

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR						
STANDS	D.P.	NO 75	1083	85	FT	NO	7083	85	FT	NO 75	7083	85	FT	
SINGLE	D.P.	NO.			FT	NO			FT	NO 1		3160	FT	
X OVER SUB	O.D.			154	FT			154	FT			154	FT	
OTHER	O.D.				FT				FT				FT	
DRILL COLLARS	O.D.			4950	4	FT		4950	4	FT		4950	4	FT
DRILL COLLARS	O.D.	NO			FT	NO			FT	NO			FT	
REAMER	9027 O.D.	KIND RMR		515	FT	KIND		515	FT	KIND		515	FT	
STABILIZER	451 O.D.	KIND BLADE		460	FT	KIND		460	FT	KIND		460	FT	
JARS	458	KIND BLADE		460	FT	KIND		460	FT	KIND		460	FT	
BUMPER SUB		KIND			FT	KIND			FT	KIND			FT	
BIT OR CORE BARREL					FT				FT				FT	
TOTAL D.P. & TOOLS				7594	78	FT		7594	78	FT		7626	38	FT
KELLY DOWN (BELOW R.B.)				3700	FT			00	FT			2562	FT	
DEPTH OF TOOLS				7631	78	FT		7634	78	FT		7652	00	FT

GEL CAUSTIC

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPT. END OF TOUR	7631 FEET	7634 FEET	7652 FEET
DEPTH START OF TOUR	7613 FEET	7631 FEET	7634 FEET
FOOTAGE DRILLED	18 FEET	3 FEET	18 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	52 1600	3 1600	52 1600	51 1600						52 1500	52 1500	55 1700
ROTARY SPEED	40	40	40	40						40	40	50
WEIGHT ON BIT	40	40	40	40						15	30	35
MUD WEIGHT	9.8	9.9	9.8	9.9						9.7	9.7	9.7
VISCOSITY	92	85	91	80						125	115	
W.L.F.C.	64		64									7.2
pH	9.0		9.0									9.0

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS	BIT CONDITION
30	8 3/4	290209	SEC. H100	2-18	33	7536	7634	769 33	Good-1-1-2
31	8 3/4	27986	H.T.C. X55R	2-10	1	7634	7652	15 45	Drilling

CORE	No	No	DST No	FROM		TO		MUD ENGINEER'S REPORT					
				PREFLOW	mins	FHP	psi	FFP	psi	Time	AM	AP	Int Gel
TYPE								Time	7:30	AM	AP	1.2	
FROM				ISI	mins	FHP	psi	FFP	psi	Mud Wt	9.7	10 Min Gel	9.1
TO				VO	mins	ISI	psi	GTS	mins	Visc	8	W.L.F.C	60
Recovery				FSI	mins	FSI	psi	FTS	mins	AV	50	pH	7.0
HOURS				RECOVERY					mins	P.V	34	Solid	10.0

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	A. NAST	FRASER	G. Sodergren			
DERRICKMAN	J. PARLEE	FRASER	J. Pedersen	Dropped	7633	54°
HELPER	J. SCHENK		R. Emberting			
HELPER	H. ALEX	KINK	L. Nicholas			
HELPER	G. GARRETT	G. Lewis	L. Cierniecki			
FIREMAN						
TOOL PUSHER						

SOBC WM E PORCUPINE 1-13

OTHER HOURLY OPERATING DETAIL WORK DONE

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
1971	Kind	Amount		
OUR	TOUR 1	12 ⁰⁰	8 ⁰⁰	DRILLING
75 FT	GEL	1300		
60 FT	CAUSTIC	50		
54 FT				
FT				
24 FT				
FT				
15 FT	TOUR 2	8 ⁰⁰	9 ⁴⁵	Drilling
60 FT		9 ⁴⁵	10 ¹⁵	SURVEY @ 7633
60 FT		10 ¹⁵	2 ⁰⁰	LOST BIT 30 + MEASURE
FT		2 ⁰⁰	2 ¹⁵	FOR JAR CHECK LOGS
FT		2 ¹⁵	3 ⁰⁰	Pin in D/C
FT		3 ⁰⁰	4 ⁰⁰	Cut D/LINE
38 FT				
62 FT				
00 FT	TOUR 3	4 ⁰⁰	4 ²⁰	Slip Line-Tighten Clamp Dead Man-Set Up Br. Ye
R		4 ³⁰	5 ⁰⁰	Rig Service Ch. B.O.P.'s Rig Savers.
FEET		5 ⁰⁰	7 ⁰⁰	Run In Hole w/ Bit #31.
FEET		7 ⁰⁰	8 ⁰⁰	Break Circ - Clean 15' To Bottom.
FEET		7 ⁰⁰	12 ⁰⁰	2-1g.
HOURS				
12:00 P.M.				

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

7	7	7	7
7.2	VEN BIT	9029	91 1/2
9.0	VEN BIT	7830	186 1/4
	VEN BIT	7027	12 3/4
	VEN BIT	458	12 3/8
	VEN BIT	451	12 3/4
	VEN BIT	7028	345 3/4
	VEN BIT	51124	148 1/2
	VEN BIT	6452	176 1/2

Notes: TRIPPER FOR BIT WAS TO DECREASE IN ...
 ONE TIGHT SEALS (7 SEALS OUT) ON 7-11 ...

Reading	Notes	Pressure	Temp	Time
54°		227.59	426.71	7:25:00
		202.45	425.5	7:30:00

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G. P.**

RIG NO **14**

50

FIELD **WILDCAT** WELL NAME **E. PORCUPINE 1-13** LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

APRIL 14 1971

MUD and CHEM

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS 4 1/2 DP	NO 74	702100 FT		NO 74	698960 FT		NO 75	708395 FT	
SINGLE DP	NO 1			NO 2	6302 FT		NO		
X OVER SUB OD		154 FT			154 FT			154 FT	
OTHER OD									
DRILL COLLARS 7 OD	16	49504 FT			49504 FT		16	49504 FT	
DRILL COLLARS OD	NO.			NO			NO		
REAMER 9027 OD	KIND RMR.	515 FT		KIND	515 FT		KIND	515 FT	
STABILIZER 451 OD	KIND BLADE	460 FT		KIND	460 FT		KIND	460 FT	
JARS 458	KIND BLADE	460 FT		KIND	460 FT		KIND	460 FT	
BUMPER SUB									
BIT OR CORE BARREL									
TOTAL DP & TOOLS		753193 FT			756355 FT			759478 FT	
KELLY DOWN (BELOW R B)		3300 FT			2905 FT			1900 FT	
DEPTH OF TOOLS		756593 FT			759260 FT			761378 FT	

TOUR 1

TOUR 2

WL material

TOUR 3

6el Water

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	7565 FEET		7592 FEET		7613 FEET	
DEPTH START OF TOUR	7539 FEET		7565 FEET		7592 FEET	
FOOTAGE DRILLED	26 FEET		27 FEET		21 FEET	

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	36 1650	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600
ROTARY SPEED R.P.M.	40	40	40	40	40	40	40	40	40	40	40	40
WEIGHT ON BIT M lbs.	40	40	40	40	40	40	40	40	40	40	40	40
MUD WEIGHT lb/gal					8.5	8.5	9.5	9.6	9.7	9.7	9.7	9.7
VISCOSITY sec/qt	92	87	83	82	80	85	74	78	74	74	72	72
W.L./F.C. c.c./32nd	6.2	6.2	6.2	6.2					6.2	6.2	6.2	6.2
p.H.	9.0		9.0						9.5			9.5
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT-HR	BIT CONDITION
30	8 3/4	289280	SEC. H100	2-18	33 1/4	7536	7613	77	2.3 DRILLING

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	LHP	p.s.i.	I.F.P.	p.s.i.	Time	A.M. P.M.	Aik
FROM		I.S.I.	mins	F.H.P.	p.s.i.	F.F.P.	p.s.i.	Mud Wt.		10 Min. Gel
TO		V.O.	mins	I.S.I.P.	p.s.i.	G.T.S.	mins	Visc		W.L.F.C.
Recovery		F.S.I.	mins	F.S.I.P.	p.s.i.	F.T.S.	mins	A.V.		p.H.
HOURS		RECOVERY						P.V.		Sand
								Y.P.		CA. ppm CL ppm

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	A. NAST	FRASER	G. Satergren	Kind	Depth	Reading
DERRICKMAN	J. PARLEE	FRASER	J. Pader sen.			
HELPER	J. SCHENK	VIAQUETTE	R. Emerling			
HELPER	A. ALEX	Riva	La Nyehalata			
HELPER	G. GARRETT	G. LEWIS	L. Chernipski			
FIREMAN						
TOOL PUSHER						

SOBC WM E PORCUPINE 13

OTHER HOURLY OPERATING DETAIL WORK DONE

MUD and CHEMICALS ADDED		From	To	
Kind	Amount			
TOUR 1				
		12 ⁰⁰	12 ³⁰	HIGH TABLE TORQUE
				CLEAN OUT HOLE
		12 ³⁸	1 ⁰⁰	DRILLING
		1 ⁰⁰	1 ¹⁵	RIG SERVICE
		1 ¹⁵	8 ⁰⁰	DRILLING
TOUR 2				
		8 ⁰⁰	10 ¹⁵	Drilling
WT material	160 bags	10 ¹⁵	10 ⁴⁵	Rig Serv. Rops Motor shut off Kelly lost
		10 ⁴⁵	4 ⁰⁰	Drilling
TOUR 3				
Gal		4 ²⁸	4 ³²	D. I. g.
Water	14 S. room	4 ³²	5 ⁵²	R. g. Service.
		5 ⁵²	12 ⁰⁰	D. I. g.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Control and misc. work

Kind	#	HRS TODAY	Comments
NEW BIT	9049	—	912
NEW BIT	9033	—	136 1/4
NEW BIT	9027	12 2 1/4	450 1/4
NEW	453	12 2 1/4	420 1/4
BLADE	451	12 2 1/4	509
W.D.C.	9028	—	145 3/4
W.D.C.	51124	—	174 1/2
W.D.C.	66452	—	124 2

Mud Data (over mud machine on W-LIFE TOUR using a mud mill)

Time	Depth	WE	VISC	PLU	PLU	YP	GE	GE	W.C.	P	H	W.C.S	S	AS	H
8:00 AM	7507	7.2	55	22	2	9	5	10	14	9.5	2	9			76
11:00 AM	7611	9.4	76	45	10	10	7	14	6	10	0.1	10	10	20	

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G. L. Knick* RIG NO 14

FIELD *WILL CAT* WELL NAME *E PORUPINE 1-13* SEC TWP Rpt W
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *APRIL 13 1971*

JOBC W...
 CHEMICAL
 Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS <i>4 1/2</i> DP NO <i>74</i> <i>698960</i> FT	NO <i>74</i> <i>698960</i> FT	NO <i>74</i> <i>698960</i> FT	NO <i>74</i> <i>698960</i> FT
SINGLE DP NO	NO	NO	NO
X-OVER SUB O.D. <i>154</i> FT	<i>154</i> FT	<i>154</i> FT	<i>154</i> FT
OTHER O.D.			
DRILL COLLARS O.D.			
DRILL COLLARS # <i>9027</i> O.D. NO <i>10</i> <i>49504</i> FT	NO <i>10</i> <i>49504</i> FT	NO <i>10</i> <i>49504</i> FT	NO <i>10</i> <i>49504</i> FT
REAMER # <i>H51</i> O.D. KIND <i>NEAR BIT</i> <i>515</i> FT	KIND <i>NEAR BIT</i> <i>515</i> FT	KIND <i>NEAR BIT</i> <i>515</i> FT	KIND <i>NEAR BIT</i> <i>515</i> FT
STABILIZER # <i>H53</i> O.D. KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT
<i>STAB</i> O.D. KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT	KIND <i>BLADE</i> <i>460</i> FT
BUMPER SUB			
BIT OR CORE BARREL			
TOTAL DP & TOOLS <i>750053</i> FT	<i>750053</i> FT	<i>750053</i> FT	<i>750053</i> FT
KELLY DOWN (BELOW R B)	<i>14</i> FT	<i>3600</i> FT	<i>3905</i> FT
DEPTH OF TOOLS <i>751403</i> FT	<i>751403</i> FT	<i>753653</i> FT	<i>753988</i> FT

TOUR 1
 TOUR 2
GEL 1000T CAUSTIC

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>7514</i> FEET	<i>7536</i> FEET	<i>7539</i> FEET
DEPTH START OF TOUR	<i>7480</i> FEET	<i>7514</i> FEET	<i>7536</i> FEET
FOOTAGE DRILLED	<i>34</i> FEET	<i>22</i> FEET	<i>3</i> FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP s.p.m. p.s.i. <i>5th 1600</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>1600</i>	<i>1600</i>	<i>1600</i>	<i>T</i>				
KOTARY SPEED R.P.M.	<i>40</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>40</i>	<i>40</i>	<i>40</i>	<i>R</i>				
WEIGHT ON BIT M.lbs.	<i>40</i>	<i>✓</i>	<i>✓</i>	<i>✓</i>	<i>40</i>	<i>40</i>	<i>40</i>	<i>I</i>				
MUD WEIGHT lb/gal	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>P</i>				
VISCOSITY sec.qt	<i>42</i>	<i>45</i>	<i>43</i>	<i>74</i>	<i>75</i>	<i>86</i>	<i>92</i>					
W.L.F.C. c.c. 32nd		<i>6.5</i>	<i>2.5</i>		<i>6.0</i>							
p.H.	<i>9.5</i>		<i>9.5</i>	<i>9.0</i>								
MUD LEVEL IN TANKS Ft.-Ins												

TOUR 3
 Note
 (circle)
 New bit
 New bit
 New bit
 Bit
 10 W.C.
 30 W.C.
 Bit 70' P.

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	FEET	BIT CONDITION
<i>29</i>	<i>8 3/4</i>	<i>298286</i>	<i>SEE H 100</i>	<i>2-10</i> <i>1-9</i>	<i>70 1/4</i>	<i>7217</i>	<i>7536</i>	<i>319</i>	<i>4.5</i>	<i>2-4-1</i>
<i>30</i>	<i>8 3/4</i>	<i>289280</i>	<i>" H 100</i>	<i>2-10</i> <i>1-9</i>	<i>1</i>	<i>7536</i>	<i>7539</i>	<i>3</i>	<i>3</i>	<i>DRILLING</i>

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
					Time	8:30 AM	AIK	0.25
					Mud Wt.	9.5	Int. Gel	6/11
					Visc.	77	10 Min. Gel	
					A.V.	49 1/2	W.L.F.C.	6.5
					P.V.	35	p.H.	9.5
					Y.P.	29	Solid	9
							CA. ppm	4000
							CL ppm	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<i>P.M. Knick</i>	<i>A. NAST</i>	<i>F. HAST</i>			
DERRICKMAN	<i>E.D. LANGRISH</i>	<i>J. PARLEE</i>	<i>T. HAST</i>	WIRELINE	7470	4 1/8
HELPER	<i>D.P. Collins</i>	<i>J. SCHENK</i>	<i>V. B. QUATE</i>	DRAG	7536	4 1/2
HELPER	<i>F. J. ...</i>	<i>A. ALER</i>	<i>Knick</i>			
HELPER	<i>J. Mac Knick</i>	<i>G. GARRETT</i>	<i>B. LEWIS</i>			
FIREMAN						
TOOL PUSHER	<i>D. ...</i>					

508C W.M. EPORCYPINE 7 T. 13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971		12:00	1:00	2.00 TONS
TOUR 1		1:00	1:15	RIG - SURVEY - (50%)
0 FT		1:15	1:30	DRILLING
FT				
7 FT				
FT				
4 FT				
2 FT				
0 FT				
0 FT				
FT				
3 FT				
5 FT				
8 FT				
TOUR 2				
GELIPROOF CAUSTIC	50#	8:00	8:30	RIG SERVICE, CHECKED B.D.P.'S,
		8:30	1:45	RIG SAVERS, SWIVEL, BUSHING,
		1:45	2:15	DRILLING
		2:15	4:00	DROP SURVEY, PUT ON KELLY
				HOIST BIT # 29
TOUR 3				
		4:00	6:15	HOIST BIT 29.
		6:15	7:00	RE-DRILL CHANGE P.W. IN REAMER.
		7:00	7:00	RUN IN SLOW
		7:00	7:45	CLEAN OUT BRIDGES 5170, 5254, 5470
		7:45	10:30	RUN IN SLOW
		10:30	11:00	CLEAN 15' TO BTM
		11:00	12:00	DRILLING

CEMENTING TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Note: $\rho_m @ 7516 : 3.2 + 72^\circ F$

FRAMER + STABILIZER DATA

Kind	#	HOURS	Cost hrs
NEAR BIT	9049	—	91 1/2
NEAR BIT	9830	—	186 1/4
NEAR BIT	9027	14	423
BLADE	453	14	468
BLADE	451	14	486 3/4
CUSHION	9028	—	345 3/4
10 D.C.	51174	—	194 1/2
30 D.C.	46452	—	194 1/2

BIT TRIP @ 7536. BRIDGE ON TRIP IN AT 592 5:55 5470.

NOT SERIOUS

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G. P. Drilling** RIG NO **14**

FIELD **WILD CAT**

WELL NAME **E PORCUPINE #13**

- DRILLING
 DEEPENING
 COMPLETING
 REDRILLING
 ABANDONING
 REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT

APRIL 12 1971

30 BC W.M.

MUD and CHEM

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS 4 1/2 D.P.	NO 72 680235 FT	NO 689637 FT	NO 689637 FT
SINGLE D.P.	NO 2 6222 FT		NO 6290 FT
X OVER SUB O.D.	154 FT	154 FT	154 FT
OTHER O.D.			
DRILL COLLARS O.D.			
DRILL COLLARS O.D.	NO 16 49504 FT	NO 49504 FT	NO 49504 FT
REAMER # 9017 O.D.	KIND NEAR BIT 515 FT	KIND 515 FT	KIND 515 FT
STABILIZER # 451 O.D.	KIND BLADE 460 FT	KIND 460 FT	KIND 460 FT
JARS # 458 O.D.	KIND BLADE 460 FT	KIND 460 FT	KIND 460 FT
BUMPER SUB			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	737550 FT	740730 FT	747020 FT
KELLY DOWN (BELOW R.B.)	39 FT	4205 FT	1005 FT
DEPTH OF TOOLS	741450 FT	744935 FT	748025 FT

TOUR 1
GE2

TOUR 2
GEL LAUSTIC FERTILIZ

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	7414 FEET	7449 FEET	7480 FEET
DEPTH START OF TOUR	7379 FEET	7414 FEET	7449 FEET
FOOTAGE DRILLED	35 FEET	35 FEET	31 FEET

	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600
ROTARY SPEED R.P.M.	40	40	40	40	40	40	40	40	40	40	40	40
WEIGHT ON BIT M.lbs.	40	40	40	40	40	40	40	40	40	40	40	40
MUD WEIGHT lb.gal	9.5	9.5	9.5	9.5	9.4	9.5	9.5	9.5	9.4	9.4	9.4	9.4
VISCOSITY sec.qt	78	77	73	73	72	72	75	92	75	74	71	71
W.L./F.C. c.c./32nd			6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0	6.0
p.H.			9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0
MUD LEVEL IN TANKS Ft.Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT. HR.	BIT CONDITION
29	P 3/4	298286	SEC H100	2-10 1-9	5 1/4	7217	7480	2634.6	DRILLING

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT
					Time 9:00 AM Mud Wt 9.5 Vis 31 AV 5 1/2 PV 37 YP 29

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	P. Mc KITTERICK	A. NAST	F. ASKER
DERRICKMAN	ED [unclear]	J. PARLEE	F. ASKER
HELPER	D. M. Cullins	J. SCHENK	V. L. QUATE
HELPER	[unclear]	A. ALEX	RINE
HELPER	J. MAC KNAK	G. GARRETT	G. OX
FIREMAN			
TOOL PUSHER	D. Ryenkamp		

Kind	Depth	Reading
PROP	7217	4 1/2
LINE	7470	

Reamed

Kind

NEAR BIT

NEAR BIT

NEAR BIT

BLADE

BLADE

CUSHION

10 D.C.

30 D.C.

SOBC W.M. EPORCYPINE 4 T 12

OTHER HOURLY OPERATING DETAIL WORK DONE

1971		MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
TOUR	Kind	Amount				
37 FT	TOUR 1	GEL	600#	12:00	1:30	DRILLING RIG SERVICE + 15.01-3 DRILLING
90 FT				1:30	1:45	
54 FT				1:45	5:05	
FT						
FT						
04 FT	TOUR 2	GEL	600#	8:00	8:30	DRILLING RIG SERVICE, CHECKED B.O.P. RIG SAVERS, SWIVEL, KELLY BUSHINGS DRILLING
15 FT				8:30	9:15	
60 FT				9:15	4:20	
60 FT				CAUSTIC 50#		
FT				FERTILIZER 25#		
20 FT	TOUR 3			4:00	4:15	RIG SERVICE DRILLING SURVEY @ 74% SURVEY @ 74%
05 FT				4:15	10:45	
25 FT				10:45	12:00	
FT						
FT						

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

Round and Sample Data

Kind	#	Wt. Tonnage	Cum. Wt.
NEAR BIT	9049	—	91 1/2
NEAR BIT	9833	—	186 1/4
NEAR BIT	9027	21 1/2	214
BLADE	458	21 1/2	454
BLADE	451	21 1/2	477 3/4
CUSHION	9028	—	245 3/4
10" D.C.	51124	—	194 1/2
30" D.C.	46452	—	194 1/2

Get in Gel 6/17
FC 6.8
9
D.D.M.
RD
Reading
4 1/2

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Becking* RIG NO *14*

FIELD *WIND CAT* WELL NAME *E. Purcup no 13* SEC TWP R. W.
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *APRIL 11 1971*

65 W
 MUD CHEM
 Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR					
STANDS	D.P.	NO 72	6830	235	FT	NO 72	6834	03	FT	NO 72	6810	235	FT
SINGLE	D.P.	NO			FT	NO 1			FT	NO 1	31	68	FT
X-OVER SUB	O.D.			154	FT			154	FT			154	FT
OTHER	O.D.				FT				FT				FT
DRILL COLLARS	O.D.				FT				FT				FT
DRILL COLLARS	O.D.	NO 16	495	04	FT	NO	495	04	FT	NO	495	04	FT
REAMER "90L7"	O.D.	KIND NEAR BIT	515		FT	KIND	515		FT	KIND	515		FT
STABILIZER "451"	O.D.	KIND BLADE	460		FT	KIND	460		FT	KIND	460		FT
JARS "458"	O.D.	KIND BLADE	460		FT	KIND	460		FT	KIND	460		FT
BUMPER SUB					FT				FT				FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL D.P. & TOOLS			7318	28	FT		7344	96	FT		7344	96	FT
KELLY DOWN (BELOW R.B.)			15		FT		1500		FT		3405		FT
DEPTH OF TOOLS			7323	28	FT		7359	96	FT		7379	01	FT

TOUR 1
Gel
 TOUR 2
GEL
MAUST

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2	5 1/2
ROTARY SPEED					40	40	40	40	40	40	40	40
WEIGHT ON BIT					40	40	40	40	40	40	40	40
MUD WEIGHT	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
VISCOSITY	74	70	70	78	76	72	85	77	86			87
W.L.F.C.	6.8	7.2	6.5	6.5	6.5	6.5	5.3	5.3				6.0
pH	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0

TOUR 3
Count
New 411
New 181
New 102
30 1/2
30 1/2
30 1/2

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZE IN 1/32	TOTAL HOURS	FROM	TO	REMARKS
29	8 3/4	245286	SEC H 100	2-10 1-9	35 3/4	7217	7779	162 4.5 Demand

CORE No.	No.	DST No.	FROM	TO	MUD ENG. REEL
TYPE		PREFLOW	mins. 1 H.P.	05	8:45
FROM		1.S.T.	mins. 1 H.P.	1.1	9:5
TO		V.O.	mins. 1 S.P.	1.1	33
Recovery		F.S.T.	mins. 1 F.S.P.	1.1	38 1/2
HOURS		RECOVERY			39

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>P. K. Tink</i>	<i>A. MAUST</i>	<i>F. S. SAK</i>
DERRICKMAN	<i>Ed Langmuir</i>	<i>J. PARKER</i>	<i>F. S. SAK</i>
HELPER	<i>J. ...</i>	<i>J. SCHENK</i>	<i>Y. ...</i>
HELPER	<i>R. M. Collins</i>	<i>A. ALEX</i>	<i>...</i>
HELPER	<i>J. MacKinnon</i>	<i>G. GARRETT</i>	<i>...</i>
FIREMAN			
TOOL PUSHER	<i>A. Engenkamp</i>		

CBC W.M. FOR CUMINE V. F. 1-13

OTHER HOURLY OPERATING DETAIL WORK DONE

971 UR 5 FT 6 FT 4 FT FT FT 4 FT 5 FT 0 FT 0 FT FT FT 6 FT 5 FT 1 FT	MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
	Kind	Amount			
TOUR 1			12:00	6:30	DRILLING
	Gel	900#	6:30	6:45	RIG SERVICE, JOBS
			6:45	5:50	DRILLING
TOUR 2					
			8:00	2:15	DRILLING
	GEL	1200#	2:15	2:45	RIG SERVICE, CHECKED B.O.P.'S,
	CAUSTIC	50#			RIG SAVERS, KELLY COCK,
					BRAKE PINS
			2:45	4:00	DRILLING
TOUR 3					
			4:00	7:00	DRILLING
			7:00	8:15	TRIP 30 ST DUMMY TRIP
			8:15	8:30	RIG SERVICE
			8:30	9:45	RUN IN SLOW
			9:45	10:15	CLEAN 10' TO STM.
			10:15	12:00	DRILLING

CEMENTING TESTING FINISH SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

Lease and Signature

9.5 8.7 6.9 7.0	Size	#	Was Tapped	W.H. HCS
	NEW BIT	9049	—	91' 2"
	NEW BIT	9330	—	186' 2"
	NEW BIT	9027	20	29' 2"
	BLADE	453	20	432' 2"
	BLADE	451	20	451' 4"
	CIRCUIT	9028	—	345' 3/4"
	10 D.C.	51124	—	194' 2"
	30 D.C.	66452	—	194' 2"

Note: 1st run dummy trip at 7:30. It is noted that (this was) the first of the 30 st dummy trips to be run on this well.

Note: 1st run at 7:30. It is noted that (this was) the first of the 30 st dummy trips to be run on this well.

Signature
COMPANY ENGINEER

TOUR REPORT

FIELD *WILD CAT*

WELL NAME *EPORUPINE*

CONTRACTOR *GP DRILLING* RIG NO. *14*

5086

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

DATE *APR 2 10* 1971

MUD and CHEM Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR										
STANDS <i>4 1/2</i>	DP	NO 76	66	135	FT	NO 70	66	135	FT	NO 71	67	141	FT					
SINGLE	DP	NO	62	93	FT	NO 2			FT	NO 2	62	47	FT					
X-OVER SUB	O.D.		1	54	FT	71	67	08	11	FT			FT					
OTHER	O.D.				FT		1	54	FT			1	54	FT				
DRILL COLLARS	O.D.	NO 16	4	95	04	FT	NO	4	95	04	FT	NO	4	95	04	FT		
REAMER <i>9027</i>	O.D.	KIND <i>HEGRAT</i>		5	15	FT	KIND		5	15	FT	KIND		5	15	FT		
STABILIZER <i>451</i>	O.D.	KIND <i>BLADE</i>		4	60	FT	KIND		4	60	FT	KIND		4	60	FT		
JARS <i>458</i>	O.D.	KIND <i>BLADE</i>		4	60	FT	KIND		4	60	FT	KIND		4	60	FT		
BUMPER SUB					FT					FT					FT			
BIT OR CORE BARREL					FT					FT					FT			
TOTAL DP & TOOLS			7	187	37	FT		7	27	40	4		7	28	15	FT		
KELLY DC <i>(BELOW R.B.)</i>				3	9	FT			4	00	0			1	60	5	FT	
DEPTH OF TOOLS			7	22	63	7	FT		7	25	90	4		7	29	75	6	FT

TOUR 1
TOUR 2
BRK 1.00 #
CAVITY 50
120 216 10

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	7226 FEET	7259 FEET	7297 FEET
DEPTH START OF TOUR	7217 FEET	7226 FEET	7259 FEET
FOOTAGE DRILLED	9 FEET	39 FEET	38 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:30 AM	12:00 AM	2:00 PM	4:30 PM	6:30 PM	8:30 PM	10:30 PM	12:30 PM
PUMP			52 1600		52 1600	51 1650	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600
ROTARY SPEED			40		40	40	40	40	40	40	40	40
WEIGHT ON BIT			40		40	40	40	40	40	40	40	40
MUD WEIGHT			92		95	96	95	95	7.8	7.4	7.5	7.5
VISCOSITY			85		98	98	91	83	40	79	77	77
W.L./F.C.					6 1/2		6 1/2		6 1/2		6 1/2	
p.H.					7.0		9.5		9.5		9.5	

TOUR 3

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES	TOTAL HOURS	FROM	TO	REMARKS
29	8 3/4	298286	SFC H100	2-10 1-9	17	7217	7397	80 4.7
28	8 3/4	27987	HW XCR	2-10 1-9	15 3/4	716	7217	101 6.4 6-5-I

TOUR 4
TOUR 5
TOUR 6
TOUR 7
TOUR 8
TOUR 9
TOUR 10
TOUR 11
TOUR 12

CORE	No	No	BST No	FROM	TO	REMARKS
TYPE			PREFLOW	min. 1 S-P	max. 1 S-P	
FROM			FSI	min. 1 S-P	max. 1 S-P	
TO			VO	min. 1 S-P	max. 1 S-P	
Recovery			FSI	min. 1 S-P	max. 1 S-P	
HOURS			RECOVERY			

Note

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>P.M. R. Ferick</i>	<i>A. HAST</i>	<i>F. BARK</i>
DERRICKMAN	<i>Ed. LANGMUIR</i>	<i>J. PARKER</i>	<i>F. BARK</i>
HELPER	<i>J. Schenk</i>	<i>J. SCHENK</i>	<i>V. D. QUITE</i>
HELPER	<i>D. M. Callahan</i>	<i>A. ALEX</i>	<i>B. BARK</i>
HELPER	<i>J. MacKNAK</i>	<i>B. GARRETT</i>	<i>G. BARK</i>
FIREMAN			
TOOL PUSHER	<i>A. P. ...</i>		

3066 W.M. E. PORTLAND CEMENT

OTHER HOURLY OPERATING DETAIL WORK DONE

MUD and CHEMICALS ADDED		From	To	
Kind	Amount			
971		12:00	2:45	HOISTING
UR	TOUR 1	2:45	5:00	HOISTING
1 FT		3:15		RUNNING BIT 29 SLOW
7 FT			0:15	HOISTING
FT		6:15	8:00	HOISTING
4 FT				
4 FT				
5 FT	TOUR 2			
0 FT	BFL 1100#	8:00	8:30	DRILLING
0 FT	CAUSTIC 50#	8:30	9:00	RIG SERVICE, CHECKED B.O.P.'S
FT	DOWSIDE 10#	9:00	4:00	DRILLING
FT				
1 FT				
5 FT				
6 FT	TOUR 3	11:00	11:15	RIG SERVICE
FEET		11:15	12:00	DRILLING
FEET				
FEET				
HOURS				
2:00 P.M.				

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARY

Kind	#	Has TOURS	DEPTH (ft)
NEAR BIT	9049	—	71 1/2
NEAR BIT	9330	—	136 1/8
NEAR BIT	9027	17	372 1/2
BLADE	453	17	413 1/2
BLADE	451	17	431 1/4
WASH	9028	—	345 3/4
10 D.C.	5112A	—	194 1/2
30 D.C.	66452	—	194 1/2

NOTE: BIT TRIP GOOD, 12' BIT TRIP OK

BIT # 28 BARE CORN W/ 20 H 100. SHOWED BENDED CHEST

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G. P. DRILLING** NO. **14**

FIELD **WILD CAT**

WELL NAME **E PORCUPINE-13**

LSD

SEC

TWP

Rd.

N

SOBC

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

APRIL 9 1971

WELL IDENTIFICATION

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS 4 1/2	DP	NO 64	62194 FT	NO 70	664473 FT	NO	661821 FT
SINGLE	DP	NO 2	6285 FT	NO 1			6293 FT
X-OVER SUB	OD		154 FT		154 FT		154 FT
OTHER	OD						
DRILL COLLARS	OD						
DRILL COLLARS	OD	NO 16	49504 FT	NO	49504 FT	NO	49504 FT
REAMER #4027	OD	KIND NEAR BIT	515 FT	KIND	515 FT	KIND	515 FT
STABILIZER #451	OD	KIND BLADE	460 FT	KIND	460 FT	KIND	460 FT
JARS #458	OD	KIND BLADE	460 FT	KIND	460 FT	KIND	460 FT
BUMPER SUB							
BIT OR CORE BARREL							
TOTAL DP & TOOLS			709326 FT		715566 FT		718737 FT
KELLY DOWN (BELOW IRB)			33 FT		2700 FT		30 FT
DLPTH OF TOOLS			712626 FT		717266 FT		721757 FT

TOUR 1

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	7126 FEET	7172 FEET	7217 FEET
DEPTH START OF TOUR	7116 FEET	7126 FEET	7172 FEET
FOOTAGE DRILLED	10 FEET	46 FEET	45 FEET

Cont #
CAUSTIC
DOWNHOLE

DAY WORK	HOURS				HOURS				HOURS			
	6:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	54 1650		54 1650		52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600
ROTARY SPEED	40		40		40	40	40	40	40	40	40	40
WEIGHT ON BIT	40		40		40	40	40	40	40	40	40	40
MUD WEIGHT	9.3		9.3		9.3	9.3	9.3	9.3	7.5	7.5	7.4	
VISCOSITY	110		110		84	84	84	81	76	76		
W. L. F. C.			5.4 7.32		6.2 2						7.0	
p.H.			8.0		10.0						9.0	
MUD LEVEL IN TANKS												

REAMER
BLADE
BLADE
LASHED
10 W.C.
30 W.C.

NO.	SIZE	SERIAL	BJI KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS
28	8 3/4	27987	W.H. X55R	2-10 1-9	15 3/4	7116	7317	101 6.4 T. 11.6
27	8 3/4	710A	HW X55	2-8	37	638	7116	725 6.4 3-6-0

CORE No	No	DST No	FROM	TO	REMARKS

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	SEVATION REPORT
DRILLER	P. McH. THERICK	A. NAST	T. HASELX	
DERRICKMAN	Ed. LANGMUIR	J. PARLEE	F. HASELX	DROP 7116 4 1/2
HELPER	F. J. ...	J. SCHENK	V. ALIQUETTE	DROP 7217
HELPER	D. M. Collins	A. ALEX	KING	
HELPER	J. MACKNAK	G. GARRETT	COX	
FIREMAN				
TOOL PUSHER				

SOBC W.M. E PORUPINE, Y.T. 1-13

MATERIALS AND CHEMICALS ADDED			OTHER HOURLY OPERATING DETAIL	
Kind	Amount	From	To	WORK DONE
1971		12:50		
TOUR 1				
1 FT		2:45	2:45	HOISTING BIT 27 AT 71.6
3 FT		3:15	3:15	BUT NEW CUTTERS ON REAMER
4 FT				RIG SERVICE + BOPS SET UP BRACKS
				RUN IN W/ BIT 28 SLOW
				CLEAN 10" TO B.T. 17.
				DRILLING
TOUR 2				
0 FT		8:00	9:45	DRILLING
0 FT		9:45	10:15	RIG SERVICE, CHECKED B.O.P.'S,
				& RIG SAVERS, SWIVEL
		10:15	4:00	DRILLING
TOUR 3				
7 FT		11:00	11:15	RIG SERVICE
		11:15	11:45	DRILLING
FEET	CRIT # 800	10:45	11:00	SURVEY @ 7217
FEET	CAUSTIC # 50	11:00	12:00	BLOW KILLY, HOIST BIT # 28
FEET	DOWDRIN # 8" 10			
HOURS				
2:00 PM				

CEMENTING TESTING FINISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

REMARKS - SINGULZE, DATA

Kind	#	Wts Tonn	GA Wts
NEW BIT	9049	—	91 1/2
NEW BIT	9830	—	186 1/4
NEW BIT	9027	15 3/4	355 1/2
BLADE	453	15 3/4	395 1/2
BLADE	451	15 3/4	414 1/4
CUSHION	9028	—	345 3/4
10 W.C.	5124	—	196 1/2
30 W.C.	66452	—	14 1/2

Note: BIT 27 TOP GOOD TO 10' FROM 24' RESTRICT

BIT # 27 TOP UP GOOD W/ H. TEST. UNUSUAL. REASON: DUES

Reading

1 1/2

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO. **144**

FIELD **WILD CAT** WELL NAME **EPORCUPINE 1-13**

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

APRIL 8 1971

SOBC

MUD and CHEM Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR					
STANDS 4 1/2	DP	NO 69	6	51	948	FT	NO	655	118	FT	NO 69	6	51	948	FT
SINGLE	DP	NO				FT	NO			FT	NO 2			6285	FT
X OVER SUB	OD			154		FT		154		FT			124		FT
OTHER	OD					FT				FT					FT
DRILL COLLARS	OD					FT				FT					FT
DRILL COLLARS 7 1/2	OD	NO 16		495	04	FT	NO	495	04	FT	NO		495	04	FT
REAMER 49027	OD	KIND MEAR 8T		515		FT	KIND	515		FT	KIND		515		FT
STABILIZER 451	OD	KIND BLADE		460		FT	KIND	460		FT	KIND		460		FT
JARS 458	OD	KIND BLADE		460		FT	KIND	460		FT	KIND		460		FT
BUMPER SUB						FT				FT					FT
BIT OR CORE BARREL						FT				FT					FT
TOTAL DP & TOOLS				7030	41	FT		7062	11	FT			7093	26	FT
KELLY DOWN (BELOW R B)				1000		FT		2900		FT			2900		FT
DEPTH OF TOOLS				7040	41	FT		7091	11	FT			7116	26	FT

TOUR 1

TOUR 2

GEL CAUSTIC

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	7040 FEET	7091 FEET	7116 FEET
DEPTH START OF TOUR	7033 FEET	7040 FEET	7091 FEET
FOOTAGE DRILLED	7 FEET	51 FEET	25 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP					52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	
ROTARY SPEED					40	40	40	40	40	40	40	
WEIGHT ON BIT					40	40	40	40	40	40	40	
MUD WEIGHT			9.4		9.2	9.4	9.4	9.4	9.5	9.5	9.5	
VISCOSITY			77		68	68	72	7.6	8	9	9	
W.L.F.C			58		60	60	60	60	65	65	65	
p.H			9.5		9.5	9.5	9.5	9.5	9.5	9.5	9.5	
MUD LEVEL IN TANKS												

KLEINKE

NO.	SIZE	SERIAL	BU KIND AND TYPE	PIPING SIZES IN 1/2"	TOTAL FEET	FROM	TO	REMARKS
27	P 3/4	21840	W.H. X55R	2-10 1-9	37	6881	7116	235 6.4

CORE	No.	No.	DST No.	FROM	TO	MUD ENGINEERS REPORT
TYPE			PREFLOW	mins	F H P	8:15
FROM			FSI	mins	F H P	9:5
TO			V.O	mins	F S I P	9:5
Recovery			FSI	mins	F S I P	9:5
HOURS			RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	P.M. RITTERICK	A. NAEST	FRASER
DERRICKMAN	Edy Langmuir	J. P. LEE	FRASER
HELPER	J. J. ...	J. SCHENK	VALICOURTE
HELPER	D.W. Collins	H. MALEX	RINE
HELPER	J. MACKNAK	G. GANNETT	COY
FIREMAN			
TOOL PUSHER	D. P. ...		

7030 4 1/4
7116

SOBC WM E PORCUPINE Y / 1-13

1971		MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
TOUR	Kind	Amount				
TOUR 1			12.00	12.00		HOIST
48 FT.			12.30	12.45		RIG SERVICE, SET B.C.P'S
85 FT.			12.45	3.00		RUN IN SLOW (LEAK 10" TO BIT),
24 FT.			3.00	3.30		WORK ON PUMPS
			3.30	3.45		DRILLING
			3.45	5.30		WORK ON NO. 1 PUMP BUT GASKET IN STUFFING BOX
			5.30	6.30		DRILLING
04 FT.			6.30	7.45		SURVEY
15 FT.	TOUR 2		7.45	5.00		DRILLING
60 FT.						DRILLING
60 FT.	GEL	2400	8.00	1.00		RIG SERVICE, CHECKED D.O.P.'S &
	CAUSTIC	50	1.00	1.15		RIG SAVERS
			1.15	4.00		DRILLING
26 FT.						
00 FT.						
26 FT.	TOUR 3		4.00	5.45		DRILLING
UR			5.45	6.00		R.O. SEX.
FEET			6.00	9.30		DRILLING
FEET			9.30	9.45		PROP SURVEY @ 7116
FEET			9.45	12.00		HOIST - T = 27
HOURS						
M 12:00 P.M.						

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING, SUMMARIES

KLEMKE & SONS TOOK 1000 GALLONS OF RIG FUEL

Wt @ 7115 = 2.90 x 30 =

REPORT	DATE	TIME	TIME	TIME
0.13	9:47			31 1/2
0.13	9:53			36 1/2
0.13	9:57	10 1/2		39 1/2
0.13	10:03	11 1/2		49 1/2
0.13	10:08	11 1/2		49 1/2
0.13	10:13			45 1/2
0.13	10:14			46 1/2
0.13	10:15			46 1/2
0.13	10:16			46 1/2
0.13	10:17			46 1/2
0.13	10:18			46 1/2
0.13	10:19			46 1/2
0.13	10:20			46 1/2
0.13	10:21			46 1/2
0.13	10:22			46 1/2
0.13	10:23			46 1/2
0.13	10:24			46 1/2
0.13	10:25			46 1/2
0.13	10:26			46 1/2
0.13	10:27			46 1/2
0.13	10:28			46 1/2
0.13	10:29			46 1/2
0.13	10:30			46 1/2
0.13	10:31			46 1/2
0.13	10:32			46 1/2
0.13	10:33			46 1/2
0.13	10:34			46 1/2
0.13	10:35			46 1/2
0.13	10:36			46 1/2
0.13	10:37			46 1/2
0.13	10:38			46 1/2
0.13	10:39			46 1/2
0.13	10:40			46 1/2
0.13	10:41			46 1/2
0.13	10:42			46 1/2
0.13	10:43			46 1/2
0.13	10:44			46 1/2
0.13	10:45			46 1/2
0.13	10:46			46 1/2
0.13	10:47			46 1/2
0.13	10:48			46 1/2
0.13	10:49			46 1/2
0.13	10:50			46 1/2
0.13	10:51			46 1/2
0.13	10:52			46 1/2
0.13	10:53			46 1/2
0.13	10:54			46 1/2
0.13	10:55			46 1/2
0.13	10:56			46 1/2
0.13	10:57			46 1/2
0.13	10:58			46 1/2
0.13	10:59			46 1/2
0.13	11:00			46 1/2

SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD **WILD CAT**

CONTRACTOR **G. P. DRILLING** RIG NO **14**

WELL NAME **E PORCUPINE 1-13**

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT **APRIL 7 / 1971**

SOBC
MUD INJ CHEMICAL
Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS 4 1/2 D.P.	NO 67	633029 FT.	NO 68	642494 FT.	NO	642494 FT.
SINGLE D.P.	NO 2	6301 FT.	NO 1	3104 FT.	NO	6281 FT.
X OVER SUB O.D.		154 FT.		154 FT.		154 FT.
OTHER O.D.						
DRILL COLLARS O.D.						
DRILL COLLARS 7" O.D.	NO 16	49504 FT.	NO	49504 FT.	NO	49504 FT.
REA MER 9.027 O.D.	KIND NEARBY	515 FT.	KIND	515 FT.	KIND	515 FT.
STABILIZER 451 O.D.	KIND BLADE	460 FT.	KIND	460 FT.	KIND	460 FT.
JARS 458	KIND BLADE	460 FT.	KIND	460 FT.	KIND	460 FT.
BUMPER SUB						
BIT OR CORE BARREL						
TOTAL D.P. & TOOLS		690423 FT.		696691 FT.		699868 FT.
KELLY DOWN (BELOW R.B.)		39 FT.		3300 FT.		35 FT.
DEPTH OF TOOLS		694323 FT.		699991 FT.		703368 FT.

TOUR 1
GEL CAUSTIC POWDER

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	6943 FEET	6999 FEET	7033 FEET
DEPTH START OF TOUR	6893 FEET	6943 FEET	6999 FEET
FOOTAGE DRILLED	50 FEET	56 FEET	34 FEET

TOUR 2
CAUSTIC POWDER

DAY WORK	HOURS				HOURS							
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600	52 1600
ROTARY SPEED	40	40	40	40	40	40	40	40	40	40	40	40
WEIGHT ON BIT	40	40	40	40	40	40	40	40	40	40	40	40
MUD WEIGHT	9.5	9.5	9.5	9.6	9.6	9.5	9.4	9.5	9.5	9.5	9.5	9.5
VISCOSITY	80	78	84	98	92	85	83	85	82	82	82	82
W.L.F.C.	5.6	5.6	5.6	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2	6.2
pH	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.0	9.5

TOUR 3
CAUSTIC POWDER

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 3/32	TOTAL HOURS	FROM	TO	REMARKS	BIT CONDITION
27	8 3/4	21840	W.H. X55R	2-10 1-9	22 1/2	6881	7033	152 1/2	OK

DESIGNER
CORNER

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT			
					Time	Temp	Mud Wt	Vis
TYPE		PREFLOW	mins	F.P.	ds	F.P.	ds	F.P.
FROM		(S)	mins	F.P.	ds	F.P.	ds	F.P.
TO		V.O	mins	F.S.P	ds	F.S.P	ds	F.S.P
Recovery		F.S.P	mins	F.S.P	ds	F.S.P	ds	F.S.P
HOURS		RECOVERY			ds	F.S.P	ds	F.S.P

Notes
New bit
New bit
Change
Change
Change
10 1/2 C
30 D.C.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD
DRILLER	Y.M. RITTERICK	A. NAST	FANISCK	Kind
DERRICKMAN	EJ LANGTUIR	J. PARLEE	FANISCK	Depth 6880
HELPER		J. SCHENK	VALIQUETTE	Read 4.0
HELPER	D.M. Collins	A. ALEX	RINE	
HELPER	J. MALKNAK	G. GARRETT	COX	
FIREMAN				
TOOL PUSHER	D. P... ..			

Note

SOBC WM E PORCUPINE YT H-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DC IE	
971	Kind	Amount	12:00	3:00	DRILLING RIG SERVICE + B.O.P.S DRILLING
UR	TOUR 1		3:00	3:15	
4	GEL.	2000#	3:15	4:00	
1	CAUSTIC	50#			
4	DOWICIDE	10#			
4					
5					
0	TOUR 2		8:00	8:30	RIG SERVICE, CHECKED B.O.P.S, RIG SAVERS, SWIVEL, BLOCKS DRILLING
0	CAUSTIC	50#			
0	DOWICIDE 'B'	10#	8:30	4:00	
8					
8	TOUR 3		4:00	5:15	DRILLING RIG SER. DRILLING CHANGE HEAD IN #1 POINT DRILLING HOIST DUMMAY TRIP
			5:15	5:30	
	CAUSTIC	50#	5:30	7:15	
	DOWICIDE 'B'	10#	7:15	8:15	
			8:15	10:00	
			10:00	12:00	

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

DESIGNED DATA DOWN FOR DOWNHOLE OF 106E

ROTOR AND STABILIZER DATA

Kind	#	LOS TOOM-	LOS HOS
NEW BIT	9049	-	91 1/2
NEW BIT	9830	-	186 1/4
NEW BIT	9027	20	325 1/4 - 305 1/4
BLADE	458	20	365 1/4 - 345 1/4
BLADE	451	20	384 - 364
CUSHION	9028	-	245 3/4
10 D.C.	51124	-	194 1/2
30 D.C.	66452	-	194 1/2

NOTE: TRIP OUT ON DUMMAY SATISFACTORY

NOTE: SURPRISE BOP DRILL ON DAYLITE TOUR. KNOWLEDGE + RESPONSE EXCELLENT

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *B.P. Co* RIG NO *14*

SOBC

FIELD *Wild Cat* WELL NAME *E. Porcupine 13D* SEC TWP Rge W
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *April 6 71* 19

MUD and CHEM Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS <i>4 1/2</i> D.P.	NO <i>67</i>	<i>6370.29</i> FT.	NO <i>57</i>	<i>6370.29</i> FT.	NO	<i>6370.29</i> FT.
SINGLE D.P.	NO.	FT.	NO	FT.	NO	<i>3128</i> FT.
X-OVER SUB O.D.		<i>15 1/4</i> FT.		<i>15 1/4</i> FT.		<i>15 1/4</i> FT.
OTHER O.D.		FT.		FT.		FT.
DRILL COLLARS O.D.		FT.		FT.		FT.
DRILL COLLARS <i>7"</i> O.D.	NO <i>16</i>	<i>49504</i> FT.	NO <i>16</i>	<i>49504</i> FT.	NO	<i>49504</i> FT.
REAMER <i>#1027</i> O.D.	KIND <i>Noor Bit</i>	<i>515</i> FT.	KIND	<i>515</i> FT.	KIND	<i>515</i> FT.
STABILIZER <i>#451</i> O.D.	KIND <i>Blade</i>	<i>460</i> FT.	KIND	<i>460</i> FT.	KIND	<i>460</i> FT.
JARS <i>#458</i>	KIND <i>Blade</i>	<i>460</i> FT.	KIND	<i>460</i> FT.	KIND	<i>460</i> FT.
BUMPER SUB.		FT.		FT.		FT.
BIT OR CORE BARREL		FT.		FT.		FT.
TOTAL D.P. & TOOLS		<i>6841.22</i> FT.		<i>6841.22</i> FT.		<i>6872.50</i> FT.
KELLY DOWN (BELOW R.B.)		<i>4005</i> FT.		<i>4005</i> FT.		<i>2100</i> FT.
DEPTH OF TOOLS		<i>6881.27</i> FT.		<i>6881.27</i> FT.		<i>6893.50</i> FT.

TOUR 1
TOUR 2
TOUR 3

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	S.P.M. <i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>							<i>56</i>	<i>56</i>
	P.S.I. <i>1100</i>	<i>1100</i>	<i>1100</i>	<i>1100</i>							<i>1100</i>	<i>1100</i>
ROTARY SPEED	R.P.M. <i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>							<i>40</i>	<i>40</i>
WEIGHT ON BIT	M.lbs. <i>40</i>	<i>40</i>	<i>40</i>	<i>40</i>							<i>40</i>	<i>40</i>
MUD WEIGHT	lb/gal <i>9</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>							<i>9.2</i>	<i>9.2</i>
VISCOSITY	sec/qt <i>86</i>	<i>86</i>	<i>80</i>	<i>76</i>							<i>96</i>	<i>83</i>
W.L.F.C.	cc/32nd <i>6.0</i>	<i>6.0</i>	<i>6.0</i>	<i>6.0</i>							<i>6.0</i>	<i>6.0</i>
pH											<i>8.0</i>	<i>8.0</i>
MUD LEVEL IN TANKS	Ft. Ins			<i>8.5</i>								

CEUSTIC

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS
<i>26</i>	<i>8 3/4</i>	<i>236226</i>	<i>Sann</i>	<i>M88210</i>	<i>1.9</i>	<i>46 1/2</i>	<i>6881</i>	<i>245</i> 53 5-8-0
<i>27</i>	<i>8 1/4</i>	<i>21840</i>	<i>WH X55K</i>	<i>2-10</i>	<i>2 1/2</i>	<i>6881</i>	<i>6393</i>	<i>12</i> 4.8

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT		
TYPE		PREFLOW	mins	IHP	psi	IFP	Time <i>7</i>
FROM		ISI	mins	FHP	psi	FHP	Mud Wt <i>9.5</i>
TO		VO	mins	ISIP	psi	GTS	V <i>76</i>
Recovery		FST	mins	FSTP	psi	FST	A.V. <i>2.12</i>
HOURS		RECOVERY					P.V. <i>0</i>

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>G. Sadaygram</i>	<i>P. M. K. T. T. ERICK</i>	<i>A. H. T.</i>
DERRICKMAN	<i>J. Pedersen</i>	<i>Ed LANGMUIR</i>	<i>J. P. HILL</i>
HELPER	<i>R. Rogers</i>	<i>D. M. Collier</i>	<i>J. S. S. S.</i>
HELPER	<i>N. Nykolati</i>	<i>F. J. J.</i>	<i>R. M. M.</i>
HELPER	<i>L. Chernopusk</i>	<i>J. M. M.</i>	<i>G. G. G.</i>
FIREMAN			
TOOL PUSHER	<i>D. D.</i>		

DEVIATION RECORD
 Kind *DROP* Depth *6890* Reading *4.0*

SOBC WM. E. Porcupine YT 1-13.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
19		12:22	1:22	Dr lg.
DUR	TOUR 1	1:22	1:45	Rig Service.
9 FT.		1:45	7:22	Dr lg.
8 FT.		7:22	7:22	Dropped Survey.
4 FT.		7:22	8:00	Blow Kelly-Break Hose Off. Hoisting.
FT.				
FT.				
4 FT.				
5 FT.	TOUR 2	8:10	8:15	THAW OUT MUD LINES
50 FT.		8:15	11:45	HOISTING & MEASURE OUT
50 FT.		11:45	12:15	RIG SERVICE & BOPS
FT.		12:15	1:00	RUN IN. D. C.
FT.		1:00	2:15	CUT DRILL LINE
FT.		2:15	3:45	RUN IN SLOW
75 FT.		3:45	4:00	PICK UP KELLY TO CLEAN OUT BRIDGEW 4780
10 FT.				
50 FT.	TOUR 3	4:00	4:15	RIG SERVICE, CHECKED B.O.P.'S
R		4:15	9:15	CLEAN OUT FROM 4780 - 5345
FEET	CAUSTIC 50			FINISH OUT TO BIT.
FEET		9:15	9:15	CLEAN OUT 15 FT. FILL
FEET		9:30	12:00	DRILLING
HOURS				
12:00 PM				

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING LOGGING, REFER TO SUMMARY.

5:00				
40				
40				
7.5				
83				
60 1/2				
80				

Kind	#	Weight	Volume
None	9049		315'
Water	932		354'
Water	9027	9'6"	305'2"
Water	453	9'6"	345'0"
Water	451	9'6"	364'
Water	9028		345'2"
Water	51124		194'2"
Water	66452		194'2"

4:10
 H. ...
 883.27
 883.29
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Dvlg.*

RIG NO *14.*

FIELD *Wild-Cat.*

WELL NAME *E. Porcupine-1-13LSD*

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

April 5. 71.

19

SOBC

MUD and CHEM

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR						
STANDS <i>4 1/2</i> D.P.	NO <i>66</i>	<i>6</i>	<i>2</i>	<i>3</i>	NO <i>66</i>	<i>6</i>	<i>2</i>	<i>3</i>	NO <i>66</i>	<i>6</i>	<i>2</i>	<i>9</i>	<i>8</i>	<i>8</i>	<i>6</i>
SINGLE D.P.	NO.				NO. <i>1</i>				NO. <i>2</i>						
X-OVER SUB O.D.				<i>154</i>				<i>154</i>					<i>154</i>		
OTHER O.D.															
DRILL COLLARS O.D.															
DRILL COLLARS <i>5" 490 7"</i> O.D.	NO.			<i>49</i>	NO <i>16</i>	<i>49</i>	<i>50</i>	<i>4</i>	NO			<i>49</i>	<i>50</i>	<i>4</i>	
REAMER <i>9027</i> O.D.	KIND <i>HEAR BIT</i>			<i>515</i>	KIND			<i>515</i>	KIND			<i>515</i>			
STABILIZER <i>451</i> O.D.	KIND <i>BLADE</i>			<i>460</i>	KIND			<i>460</i>	KIND			<i>460</i>			
JARS <i>458</i>	KIND <i>BLADE</i>			<i>460</i>	KIND			<i>460</i>	KIND			<i>460</i>			
BUMPER SUB															
BIT OR CORE BARREL															
TOTAL D.P. & TOOLS				<i>674635</i>				<i>677809</i>				<i>680979</i>			
KELLY DOWN (BELOW R.B.)				<i>2025</i>				<i>31</i>				<i>3300</i>			
DEPTH OF TOOLS				<i>676660</i>				<i>680909</i>				<i>684279</i>			

TOUR 1
Gel
Water Str

TOUR 2
GEL.
Dowicide
KELZAN

TOUR 3
GEL

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	<i>6766</i>	FEET	<i>6809</i>	FEET	<i>6842</i>	FEET
DEPTH START OF TOUR	<i>6723</i>	FEET	<i>6766</i>	FEET	<i>6809</i>	FEET
FOOTAGE DRILLED	<i>43</i>	FEET	<i>43</i>	FEET	<i>33</i>	FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP sp.m. p.s.i.	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1550</i>	<i>56</i> <i>1550</i>
ROTARY SPEED R.P.M.	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT M lbs.	<i>39</i>	<i>39</i>	<i>39</i>	<i>39</i>	<i>39</i>	<i>39</i>	<i>39</i>	<i>40</i>	<i>40</i>	<i>40</i>	<i>40</i>	<i>40</i>
MUD WEIGHT lb/gal	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.2</i>
VISCOSITY sec-qt	<i>74</i>	<i>75</i>	<i>80</i>	<i>76</i>	<i>76</i>	<i>83</i>	<i>88</i>	<i>90</i>	<i>95</i>	<i>95</i>	<i>95</i>	<i>93</i>
W.L.F.C. c.c. 32nd	<i>5.6</i> <i>2</i>	<i>5.6</i> <i>2</i>	<i>5.6</i> <i>2</i>	<i>5.6</i> <i>2</i>	<i>5.6</i> <i>2/32</i>	<i>5.9</i> <i>2/32</i>	<i>5.9</i> <i>2/32</i>	<i>5.2</i> <i>2</i>	<i>5.2</i> <i>2</i>	<i>6.0</i> <i>2</i>	<i>6.0</i> <i>2</i>	<i>6.0</i> <i>2</i>
p.H.	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>8.5</i>	<i>8.5</i>	<i>8.5</i>
MUD LEVEL IN TANKS Ft.-Ins												

MUD	WELL	TIME	TIME
<i>7.46</i>	<i>13.00</i>	<i>3.00</i>	<i>3.00</i>
<i>8</i>	<i>6.16</i>	<i>4.5</i>	<i>4.5</i>
<i>10</i>		<i>6.0</i>	<i>6.0</i>
<i>12</i>	<i>11</i>	<i>6.0</i>	<i>6.0</i>
<i>2</i>	<i>3.30</i>		
<i>3</i>			
<i>5</i>			
<i>10</i>			
<i>12</i>	<i>6.42</i>	<i>4.0</i>	<i>4.0</i>

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32"	TOTAL HOURS	FROM	TO	REMARKS	BIT CONDITION
<i>26</i>	<i>8 3/4</i>	<i>236826</i>	<i>Sec. 588</i>	<i>270-1-8</i>	<i>29 3/4</i>	<i>6.26</i>	<i>6.24</i>	<i>26 5.2</i>	<i>run in</i>

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT
TYPE		PREFLOW	mins. F.H.P.	ps. F.P.P.	ps. Time
FROM		ISF	mins. F.H.P.	ps. F.P.P.	ps. Mud Wt.
TO		VD	mins. F.H.P.	ps. F.P.P.	mins. Wt.
Recovery		FSF	mins. F.H.P.	ps. F.P.P.	mins. Wt.
HOURS		RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION REPORT
DRILLER	<i>G. Sodergren</i>	<i>P. M. K. TIERICK</i>	<i>A. NAST</i>	Kind _____ Depth _____ Reading _____
DERRICKMAN	<i>J. Pedersen</i>	<i>Ed LANGMUIR</i>	<i>J. PARLEE</i>	<i>WIRELINE 6776 3 1/8</i>
HELPER	<i>R. Rogers</i>	<i>F. Juday</i>	<i>J. SCHENK</i>	
HELPER	<i>L. Nyckelak</i>	<i>D. W. Collins</i>	<i>A. ALEX</i>	
HELPER	<i>L. Cherniak</i>		<i>G. GARRETT</i>	
FIREMAN				
TOOL PUSHER				

SOBC WM. E. Porcupine YT 1-13.

MUD and CHEMICALS ADDED			From		To		OTHER HOURLY OPERATING DETAIL WORK DONE	
UR	Kind	Amount						
19			12 ⁰⁰	12 ³⁰				Rig Service,
UR	TOUR 1		12 ²²	8 ⁰⁰				Drig.
6 FT	Gel	1200#						
FT	Water Stream	1/2"						
4 FT								
FT								
4 FT								
5 FT	TOUR 2		8 ⁰⁰	11 ⁰⁰				DRILLING
0 FT	GEL.	1900#	11 ⁰⁰	11 ¹⁵				RIG SERVICE + B.P.P.S
0 FT	Dowicide B	25#	11 ¹⁵	12 ¹⁵				SURVEY
FT	KELZAN A.L.	50#	12 ¹⁵	4 ⁰⁰				DRILLING
FT								
9 FT								
0 FT								
9 FT	TOUR 3		4 ⁰⁰	6 ⁰⁰				DRILLING
			6 ⁰⁰	6 ¹⁵				RIG SERVICE, CHECKED BOP & RIG SAVER
FEET	GEL	400	6 ¹⁵	12⁰⁰				DRILLING
FEET				9 ⁴⁵				
FEET			9 ⁴⁵	11 ¹⁵				CIRC. SAMPLE
HOURS			11 ¹⁵	12 ⁰⁰				DRILLING
2:00 P.M.								

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + DESLTER DATA														
Time	Depth	Time Due Gals	Water Fluid	Over Fluid	Pressure	Flow Line W.P.	Visc	HU	RV	Yield	API	10 sec	30 sec	60 sec
9.2	8:00 AM	30	9.8	9.5	23	7.5	75							
9.3	4	45	9.8	9.5	23	7.5	75							
6.0	2	45	9.8	9.5	23	7.5	75							
8.5	8	45	9.8	9.5	23	7.5	76							
	10	60	10.0	9.4	35	7.5	67	40	20	2	14	10	10	3.0 x 45
	12 N	60	10.0	9.4	35	7.5	67							
	2						25							
	2	6:30 A					20							
	0						75							
	5		35	9.9	9.4	35	9.5							
	10		40	9.8	9.3	30	7.5							
	12 A	6:42	40	9.8	9.1	30	7.5							

Kind	#	Weight	Volume
NEH 01	7040		717
NEH 10	7930		156.0
NEH 10	7027	22.2	296
Water	458	22.1	200
Slime	451	22.2	200.76
Water	7028		45.0
Water	511.1		74.2
Water	66452		74.2

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. D-1g.*

RIG NO *14.*

FIELD *Wild-Cat.* WELL NAME *E. Porcupine 1-13* LSD

SEC

TWP

Rpt

A

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *April 4, 71*

19

SOBC W

MUD and CHEMICALS

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO <i>64</i>	<i>6047</i> FT	NO <i>65</i>	<i>6141</i> FT	NO <i>65</i>	<i>6141</i> FT
SINGLE	D.P.	NO <i>2</i>	<i>6280</i> FT	NO		NO <i>1</i>	<i>3160</i> FT
X-OVER SUB	O.D.		<i>154</i> FT		<i>154</i> FT		<i>154</i> FT
OTHER	O.D.						
DRILL COLLARS	O.D.						
DRILL COLLARS	" <i>7</i> " O.D.	NO <i>16</i>	<i>4950</i> FT	NO <i>16</i>	<i>4950</i> FT	NO	<i>4950</i> FT
REAMER	<i>9037</i> O.D.	KIND	<i>515</i> FT	KIND	<i>515</i> FT	KIND	<i>515</i> FT
STABILIZER	<i>451</i> O.D.	KIND	<i>460</i> FT	KIND	<i>460</i> FT	KIND	<i>460</i> FT
JARS	<i>Blade 457</i>	KIND	<i>460</i> FT	KIND	<i>460</i> FT	KIND	<i>460</i> FT
BUMPER SUB		KIND		KIND		KIND	
BIT OR CORE BARREL							
TOTAL D.P. & TOOLS			<i>6621</i> FT		<i>6651</i> FT		<i>6683</i> FT
KELLY DOWN (BELOW R.B.)			<i>304</i> FT		<i>29</i> FT		<i>400</i> FT
DEPTH OF TOOLS			<i>6650</i> FT		<i>6680</i> FT		<i>6723</i> FT

TOUR 1

TOUR 2

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>6650</i> FEET	<i>6680</i> FEET	<i>6723</i> FEET
DEPTH START OF TOUR	<i>6636</i> FEET	<i>6651</i> FEET	<i>6680</i> FEET
FOOTAGE DRILLED	<i>15</i> FEET	<i>29</i> FEET	<i>43</i> FEET

GEL. CAUSTIC

GEL

DAY WORK	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	sp.m. <i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>				<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>
ROTARY SPEED	R.P.M. <i>50</i>	<i>50</i>	<i>50</i>					<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT	M. lbs. <i>30</i>	<i>35</i>	<i>30</i>					<i>40</i>	<i>40</i>	<i>40</i>	<i>40</i>	<i>40</i>
MUD WEIGHT	lb/gal <i>9.6</i>	<i>9.6</i>	<i>9.5</i>					<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>
VISCOSITY	sec. qt. <i>95</i>	<i>75</i>		<i>72</i>	<i>68</i>	<i>69</i>		<i>76</i>	<i>75</i>	<i>75</i>	<i>73</i>	
W.L.F.C.	cc 32nd <i>54</i>	<i>54</i>				<i>54</i>		<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	
p.H.	<i>9.5</i>	<i>9.5</i>				<i>9.0</i>		<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	

DESIGTER

NOTE

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	DEPTH	BIT CONDITION
<i>26</i>	<i>8 3/4</i>	<i>236826</i>	<i>SEC. 588</i>	<i>1-9</i>	<i>19 1/4</i>	<i>6636</i>	<i>6723</i>	<i>87</i>	<i>4.5</i>

ROUNDER

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT	
TYPE		PREFLOW	mins	F.H.P.	ps	F.P.P.
FROM		ISI	mins	F.H.P.	ps	F.P.P.
TO		v. D.	mins	F.H.P.	ps	F.P.P.
Recovery		F.S.I.	mins	F.S.P.	ps	F.T.S.
HOURS		RECOVERY				

KIND

NEAR BIT

NEAR BIT

NEAR BIT

BLADE

BLADE

BLADE

BLADE

BLADE

BLADE

BLADE

BLADE

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>G. Sodergren</i>	<i>P. McKinnick</i>	<i>A. NAST</i>
DRIFTRICKMAN	<i>J. Pedersen</i>		<i>J. PARKER</i>
HELPER	<i>R. Rogers</i>	<i>F. Judson</i>	<i>J. SCHENK</i>
HELPER	<i>L. Nyschelat</i>	<i>R. McCallister</i>	<i>R. ALEX</i>
HELPER	<i>L. Chernipecki</i>	<i>J. Macknak</i>	<i>G. BARRETT</i>
FIREMAN			
TOOL PUSHER	<i>D. [Signature]</i>		

BLADE

BLADE

BLADE

BLADE

SOBC WM. E Porcupine YT 1-13.

19 DUR 2 FT 0 FT 4 FT FT FT 4 FT 5 FT 0 FT 0 FT FT FT 5 FT 0 FT 5 FT	MUD and CHEMICALS ADDED		From		OTHER HOURLY OPERATIONS WORK DONE
	Kind	Am			
	TOUR 1		12 ⁰⁰	1 ³⁰	Finish Running In W/B.t #26. Hit Bridge @ 4500 Picked Up Kelly & Cleaned Out Break Core & Clean 21' T. Bottom. D-19: Service Pump. Change Head Rubbers. D-19. DRILLING RIG SERVICE - 1500 DRILLING DRILLING RIG SERVICE, CHECKED B.O.P.'s DRILLING
			1 ³⁰	2 ²⁰	
			2 ²⁰	3 ⁰⁰	
			2 ⁰⁰	6 ⁰⁰	
			6 ⁰⁰	7 ⁰⁰	
			7 ⁰⁰	8 ⁰⁰	
			8 ⁰⁰	11 ¹⁵	
	GEL. 1000 ⁰⁰		11 ¹⁵	11 ⁴⁵	
	CAUSTIC 50 ⁰⁰		11 ⁴⁵	4 ⁰⁰	
	TOUR 3		4 ⁰⁰	6 ³⁰	
	GEL 1200		6 ³⁰	6 ⁴⁵	
			6 ⁴⁵	12 ⁰⁰	

56 1700 CEMENTING TESTING DATA - SEE ALL FOR DETAILS INCLUDING LOGGING SUMMARY

50 DESULTEK DATA (RAW 20 UNITS)

40

9.5 UNDERFLOW 10.1 @ 40 SEC gal

73 OVERFLOW 9.5

5.6

9.5 NOTE: Rmt @ 6666 : 310 @ 76 F

70 RUNNER AND STABILIZER DATA

DRT	KIND	#	Wts Tons	Lim. Wts
	NEAR BIT	9049	—	91 2
11/7	NEAR BIT	9830	—	186 4
6.3	NEAR BIT	9027	19 1/4	275 1/2
2.8	BLADE	458	19 1/2	315 1/2
9	BLADE	451	19 1/4	334 1/4
40/10	CO WELD	9028	—	345 3/4
200 100	10 D.C.	51124	—	194 1/2
	30 D.C.	66452	—	194 1/2

Note Under Blades AT 1100 on 12/11/13

Signature Company Engineer

TOUR REPORT

CONTRACTOR *G.P. Dwyer* HOLE NO. *14*

S.O.B.C.

FIELD *Wild-Cat* WELL NAME *E. Porcupine-13* LSD

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *April 3/71*

19

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS <i>4 1/2</i> D.P.	NO <i>64</i>	<i>604744</i> FT	NO <i>64</i>	<i>604744</i> FT	NO	<i>611024</i> FT
SINGLE D.P.	NO		NO <i>1</i>	<i>3092</i> FT	NO	
X OVER SUB O.D.		<i>154</i> FT		<i>154</i> FT		<i>154</i> FT
OTHER O.D.						
DRILL COLLARS O.D.						
DRILL COLLARS O.D.	NO <i>16</i>	<i>49504</i> FT	NO <i>16</i>	<i>49504</i> FT	NO	<i>49504</i> FT
REAMER <i>No. 2 9027</i> D	KIND	<i>515</i> FT	KIND	<i>515</i> FT	KIND	<i>515</i> FT
STABILIZER <i>Blade 451</i> O.D.	KIND	<i>460</i> FT	KIND	<i>460</i> FT	KIND	<i>460</i> FT
JARS <i>Blade 458</i>	KIND	<i>460</i> FT	KIND	<i>460</i> FT	KIND	<i>460</i> FT
BUMPER SUB						
BIT OR CORE BARREL						
TOTAL D.P. & TOOLS		<i>653037</i> FT		<i>658929</i> FT		<i>662117</i> FT
KELLY DOWN BELOW R.B.I.		<i>1763</i> FT		<i>37</i> FT		<i>1500</i> FT
DEPTH OF TOOLS		<i>657300</i> FT		<i>662629</i> FT		<i>663617</i> FT

TOUR 1

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	<i>6573</i>	FEET	<i>6626</i>	FEET	<i>6636</i>	FEET
DEPTH START OF TOUR	<i>6926</i>	FEET	<i>6573</i>	FEET	<i>6626</i>	FEET
FOOTAGE DRILLED	<i>47</i>	FEET	<i>53</i>	FEET	<i>10</i>	FEET

TOUR 2
Caustic

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP S.P.M. P.S.I.	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>	<i>56</i> <i>1700</i>					<i>56</i> <i>1700</i>			
ROTARY SPEED P.P.M.	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>					<i>50</i>			
WEIGHT ON BIT M.lbs.	<i>28</i>	<i>28</i>	<i>28</i>	<i>28</i>					<i>28</i>			
MUD WEIGHT lb.gal	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.4</i>	<i>9.5</i>		<i>9.6</i>			
VISCOSITY sec.cst	<i>105</i>	<i>92</i>	<i>97</i>	<i>96</i>	<i>76</i>	<i>77</i>	<i>75</i>		<i>74</i>			
W.L.F.C. cc. 32nd				<i>5.2</i> <i>100</i>		<i>5.2</i> <i>100</i>			<i>5.6</i> <i>2</i>			
pH				<i>9.0</i>		<i>8.5</i>			<i>8.5</i>			
MUD LEVEL IN TANKS Ft. Ins												

TOUR 3
GEL

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	REMARKS
<i>25</i>	<i>R 3/4</i>	<i>143069</i>	<i>Sec SSB</i>	<i>7-9</i>	<i>SS 1/2</i>	<i>6185</i>	<i>6636</i>	<i>443 8.1 1 1.1 I</i>

Time
10:1
10:2
10:3
10:4
10:5
10:6
10:7
10:8
10:9
10:10
10:11
10:12
10:13
10:14
10:15
10:16
10:17
10:18
10:19
10:20
10:21
10:22
10:23
10:24
10:25
10:26
10:27
10:28
10:29
10:30
10:31
10:32
10:33
10:34
10:35
10:36
10:37
10:38
10:39
10:40
10:41
10:42
10:43
10:44
10:45
10:46
10:47
10:48
10:49
10:50
10:51
10:52
10:53
10:54
10:55
10:56
10:57
10:58
10:59
11:00

CORR No	No	DST No	FROM	TO	WATER LEVELS REPORT
TYPE		PREFLOW	mins FHP	ps FHP	
FROM		ISI	mins FHP	ps FHP	
TO		VO	mins FHP	ps FHP	
Recovery		FSI	mins FHP	ps FHP	
HOURS		RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEPARTMENT RECORD
DRILLER	<i>G. Sedaryren</i>	<i>P.M. R. TIERICK</i>	<i>A. HAST</i>	
DERRICKMAN	<i>J. Pedersen</i>	<i>Ed. LUNG MUIR</i>	<i>J. PARRIE</i>	<i>Dilapero 6636 3 1/4</i>
HELPER	<i>R. Rogers</i>	<i>F. Gardner</i>	<i>J. SCHENK</i>	<i>W.L. 6558 2 2/3</i>
HELPER	<i>L. Mykelat</i>	<i>D.M. Collins</i>	<i>A. HLEY</i>	
HELPER	<i>L. Chernipaski</i>	<i>J. MACK NAK</i>	<i>G. GARETT</i>	
FIREMAN				
TOOL PUSHER	<i>D. Pugulamp</i>			

Time
10:1
10:2
10:3
10:4
10:5
10:6
10:7
10:8
10:9
10:10
10:11
10:12
10:13
10:14
10:15
10:16
10:17
10:18
10:19
10:20
10:21
10:22
10:23
10:24
10:25
10:26
10:27
10:28
10:29
10:30
10:31
10:32
10:33
10:34
10:35
10:36
10:37
10:38
10:39
10:40
10:41
10:42
10:43
10:44
10:45
10:46
10:47
10:48
10:49
10:50
10:51
10:52
10:53
10:54
10:55
10:56
10:57
10:58
10:59
11:00

S. O. B. C. W.M. E. Porcupine YT 1-13.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	1:30	Drig. Rig Service Con.
		1:30	1:45	
		1:45	6:00	Drig. Survey @ 6558'
		6:00	7:00	
		7:00	8:00	Drig.
TOUR 2		8:00	11:15	DRILLING
Caustic	50 ⁰⁰	11:15	11:30	RIG SERVICE
		11:30	4:00	DRILLING
TOUR 3		4:00	5:00	DRILLING
		5:00	5:15	RIG SERVICE, CHECKED B.O.P.S
		5:15	6:30	DRILLING
GEL	400	6:30	7:00	DROP SURVEY @ 6636
		7:00	9:30	HOIST BIT # 25
		9:30	10:30	CHECK RAMPS, CHANGE BITS
				CHANGE PINS IN REAMER
		10:30	12:00	RUN IN W/ BIT # 26

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

MUD AND DESLTER DATA

Time	WSPM	TIME DOWN	WSPM	WSPM	Pressure	Flow	WISC	AV	PH	YP	100	100	PL	WIL	WSP	CE	14	17
12M	65/6	34	9.7	9.5	29	9.5	105											
2		34	9.7	9.5	29	9.5	92						10					
4		34	9.7	9.5	29	9.5	95											
6		34	9.7	9.5	29	9.5	97											
8		34	9.7	9.5	29	9.5	96											
10		45	9.9	7.4	28	9.5	76	45	28	34	12	20	9.0	6.4	40	150	100	
12U	66/6	45	9.7	9.4	28	9.4	77											
2		45	9.9	9.4	28	9.5	75											
4	66/6	45	9.7	9.5	28	9.6	74											

REAMER AND STABILIZER DATA

Kind	#	WSPM TOOTH	WSPM
NEAR BIT	9049	—	91 1/2
NEAR BIT	7830	—	186 1/2
NEAR BIT	9027	16 1/2	256 1/4
BLADE	458	16 1/2	296 1/4
BLADE	451	16 1/2	315
W D.C.	9028	—	345 3/4
W D.C.	51124	—	174 1/2
3U D.C.	66458	—	194 1/2

WELL LOG SLOW DOWN AT 20'
 12:00 AM 6636' BIT WAS 0
 VARI SLOW CHANGE NO CHANGE
 FOR SLOW DOWN

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G. P. D-1g.* DATE *14.*

FIELD *Wild Cat* WELL NAME *E. Porcupine H3*

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING
 TOTAL HOURS END NO. OF MINUTE *April 2/71* 19

SOBC

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS <i>4 1/2</i> D.P.	NO <i>62</i>	<i>585836</i> FT		NO	<i>585836</i> FT		NO <i>63</i>	<i>598397</i> FT	
SINGLE D.P.	NO <i>9</i>			NO	<i>6337</i> FT		NO <i>1</i>		
X OVER SUB O.D.		<i>154</i> FT			<i>154</i> FT			<i>154</i> FT	
OTHER O.D.									
DRILL COLLARS O.D.									
DRILL COLLARS O.D.									
DRILL COLLARS REAMER <i>7</i> O.D.	NO <i>16</i>	<i>49504</i> FT		NO <i>16</i>	<i>49504</i> FT		NO	<i>49504</i> FT	
Blade # <i>9027</i> O.D.	KIND	<i>515</i> FT		KIND	<i>515</i> FT		KIND	<i>515</i> FT	
Blade # <i>451</i> O.D.	KIND	<i>460</i> FT		KIND	<i>460</i> FT		KIND	<i>460</i> FT	
Blade # <i>458</i>	KIND	<i>460</i> FT		KIND	<i>460</i> FT		KIND	<i>460</i> FT	
BUMPER SUB									
BIT OR CORE BARREL									
TOTAL D.P. & TOOLS		<i>636929</i> FT			<i>643266</i> FT			<i>649450</i> FT	
KELLY DOWN (BELOW R.B.)		<i>4205</i> FT			<i>36</i> FT			<i>3200</i> FT	
DEPTH OF TOOLS		<i>641134</i> FT			<i>646866</i> FT			<i>652650</i> FT	
TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR		<i>6411</i> FEET			<i>6468</i> FEET			<i>2520</i> FEET	
DEPTH START OF TOUR		<i>6342</i> FEET			<i>6411</i> FEET			<i>6469</i> FEET	
FOOTAGE DRILLED		<i>69</i> FEET			<i>57</i> FEET			<i>58</i> FEET	

Caustic

Caustic

GEL KELZAN

	HOURS				HOURS					
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM
PUMP SPM	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>	<i>56</i>
PS	<i>1700</i>	<i>1700</i>	<i>1700</i>	<i>1700</i>	<i>1750</i>	<i>1750</i>	<i>1750</i>	<i>1700</i>	<i>1100</i>	<i>1100</i>
ROTARY SPEED RPM	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT M lbs	<i>25</i>	<i>25</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>28</i>	<i>28</i>
MUD WEIGHT lb gal	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.5</i>	<i>9.5</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>
VISCOSITY sec ct	<i>85</i>	<i>100</i>	<i>82</i>	<i>84</i>	<i>82</i>	<i>75</i>	<i>77</i>	<i>86</i>	<i>86</i>	<i>74</i>
W L F C cc 32nd				<i>5.0</i>	<i>5.2</i>	<i>5.2</i>	<i>5.2</i>	<i>5.8</i>	<i>5.8</i>	<i>5.8</i>
pH				<i>9.5</i>	<i>8.5</i>			<i>9.0</i>	<i>9.0</i>	<i>9.0</i>
MUD LEVEL IN TANKS Ft Ins										

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN INCH	TOOTH PROFILES	FRONT	BACK	SIDE
<i>25</i>	<i>P 1/2</i>	<i>343069</i>	<i>S 88</i>	<i>2-10</i> <i>1-7</i>	<i>39</i>	<i>6133</i>	<i>234</i>	<i>338 8.7</i>

CORE No	No	DST No	FROM	TO	MUD ENGINEER REPORT
TYPE			PREFLOW	min	FHP
FROM			FST	min	FHP
TO			VO	min	FHP
Recovery			FST	min	FHP
HOURS			RECOVERY		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>G. Sodergren</i>	<i>PHIL RITTERICK</i>	<i>A. NAST</i>
DERRICKMAN	<i>J. Pedersen</i>	<i>Ed. LANGMUIR</i>	<i>J. PAPER</i>
HELPER	<i>R. Rogers</i>	<i>D. M. Collins</i>	<i>J. SLOVENK</i>
HELPER	<i>L. Nycholat</i>	<i>A. ALEX</i>	
HELPER	<i>L. Charnipaski</i>	<i>J. MACKNAK</i>	<i>G. GORDETT</i>
FIREMAN			
TOOL PUSHER	<i>D. Reginkamp</i>		

Time	Mud	Wt	Temp
1	<i>342</i>	<i>40</i>	
2	<i>342</i>	<i>40</i>	
3	<i>342</i>	<i>40</i>	
4	<i>343</i>	<i>40</i>	
5	<i>343</i>	<i>40</i>	
6	<i>343</i>	<i>40</i>	
7	<i>343</i>	<i>40</i>	
8	<i>343</i>	<i>40</i>	
9	<i>343</i>	<i>40</i>	
10	<i>343</i>	<i>40</i>	
11	<i>343</i>	<i>40</i>	
12	<i>343</i>	<i>40</i>	

SOBC WM EAST PORCUPINE YT I-13.

OTHER HOURLY OPERATING DETAIL WORK DONE

9 UR 7 FT 4 FT 4 FT 5 FT 0 FT 0 FT 0 FT 0 FT 0 FT 0 FT 0 FT FEET FEET FEET HOURS 12:00 P.M.	MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
	Kind	Amount			
	TOUR 1		12:00	12:22	Dr 19. Rig Service. Dr 19. Ran Survey.
	Caustic	50#	12:22	12:45	
			12:45	7:45	
			7:45	8:00	
	TOUR 2		8:00	8:15	DRILLING MIXING SURVEY MUD TO HEAVY DRILLING RIG SERVICE + BOYS WORKPIPE + SURVEY DRILLING
	Caustic	50#	8:15	12:00	
			12:00	12:45	
			12:45	1:00	
			1:00	4:00	
	TOUR 3		4:00	4:45	DRILLING RIG SERVICE ADD SURVEY @ 6464 DRILLING
	GEL	1200	4:45	5:00	
	KELSPAN	50	5:00	5:45	
			5:45	12:00	

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

50
58
28
9.4
9.9
9.0


MUD + DESIGNER DATA																		
T.M.	DEPTH	TIME / GAL	WATER FLOW	OVER FLOW	VISC	AV	W	YP	100 GPM	10 sec	pH	IL	CONC	SP	SEC. TIME	TIME	REMARKS	
8:00 AM	6412	40	9.9	9.3	85	45 1/2	29	32	11	70	7.0	2.0	40	150	205			2.3 3.5 to 7.5
10	6477	40	9.9	9.3	80													9.4
17	6407	40	9.9	9.4	85													2.5
2	6453	35	9.9	9.3	77													9.4
1	6403	65	9.7	9.4	84													9.4
6		70	9.7	9.4	86													9.1
8		70	9.9	9.4	86													9.1
10		70	9.9	9.4	74	23	24	25	9	18	7.2							9.4
12 M	6505	30	9.7	9.4														9.4

Reading 1 3/4

REMARKS + MISC DATA			
Kind	#	INS TOWER	INS HYS
WELL BIT	9049	—	91 1/2
WELL BIT	9030	—	186 1/4
WELL BIT	9027	21 1/4	59 3/4
BLIND	453	21 1/4	279 3/4
BLIND	451	21 1/4	298 1/2
CASING	9028	—	345 3/4
10" D.C.	51124	—	194 1/2
30" D.C.	66452	—	114 1/2

RESULTS OF 16" MUD LOGS WERE MISSED — VISCOSITY MUD.

DRIPPER SLIGHTLY OVER 10 23, 22. MISC DATA @ 6464


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP**

WELL NO **13**

FIELD **WILCOX**

WELL NAME

USD

SEC

TWP

Rd

A

DRILLING DEEPENING COMPLETING

EAST **1000** **13**

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 M. ONIGHT

1971

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR				
	NO	FT	NO	FT	NO	FT	NO	FT					
STANDS 4 1/2	60	5669	01	FT	60	5669	01	FT	60	5669	01	FT	
SINGLE	NO			FT	2	63	37	FT	1	63	37	FT	
X OVER SUB	OD		154	FT		154	FT			154	FT		
OTHER	OD			FT			FT				FT		
DRILL COLLARS 7	OD	16	49	504	FT			FT				FT	
DRILL COLLARS	OD	NO		FT	NO 16	49	504	FT	NO		49	504	FT
REAMER Near B.C. 9027	OD	KIND		515	FT	KIND		515	FT	KIND		515	FT
STABILIZER 451	OD	KIND		460	FT	KIND		460	FT	KIND		460	FT
JARS 458	OD	KIND		460	FT	KIND		460	FT	KIND		460	FT
BUMPER SUB	OD	KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL	OD			FT			FT				FT		
TOTAL DP & TOOLS			617	994	FT		624	331	FT		62	06	62
KELLY DOWN BELOW R.B.				3206	FT			37	FT			260	2
DEPTH OF TOOLS				621	200	FT		628	031	FT		62	421

Gel Kelzan

GEL KENZAN CONST

GEL KENZAN

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT
DEPTH END OF TOUR		621	2	FEET		628	0	FEET		62	4	2
DEPTH START OF TOUR		618	8	FEET		621	2	FEET		62	8	0
FOOTAGE DRILLED			24	FEET			68	FEET			62	

DAY WORK	HOURS											
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP					56	56	✓		56	56	56	56
ROTARY SPEED			30-54	54	50	50	✓		50	50	50	50
WEIGHT ON BIT			10-35	35	35	35	✓		35	35	35	35
MUD WEIGHT			9.5	9.5	9.4	9.5	9.5		9.5	9.5	9.4	9.4
VISCOSITY			75	75	73	79	82		81	78	75	78
W.L.F.C.				4.3/32		5.4/32			6.0/20	6.0/20	6.0/20	6.0
pH				9.5		9.5			9.0	9.0	9.0	9.0

7:00
7:45
8:00
10
12V
2
4
6
8
12M

6210
6206
6204
6202
6200
6200
6200
6200

6210
6206
6204
6202
6200
6200
6200
6200

SIGNATURES	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
	DRILLER	DERRICKMAN	HELPER	HELPER	HELPER	HELPER
DRILLER	G. Sodergren	J. M. Kitchin	A. NAST			
DERRICKMAN	J. Pedersen	Ed LANGMUIR	J. PARLÉE	TATCO	6225	112
HELPER	R. Rogers	J. M. Collins	J. SCHENK			
HELPER	L. Nycholatz	F. Judd	A. ALEX			
HELPER	L. Charijowski	J. MAC KWAK	G. GARRETT			
FOREMAN						
TOOL WASH	A. Benschamp					

6210
6206
6204
6202
6200
6200
6200
6200

6210
6206
6204
6202
6200
6200
6200
6200

SOPC WA EAST DISCOVERY ST I-13


MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
		12 ⁰⁰	1 ⁰⁰	Finish Hoisting Bit #24.
	400#	1 ⁰⁰	1 ³⁰	Break Bit - Christensen Service
ELZAN	25#			Man Caliper Reamers.
		1 ³⁰	2 ⁰⁰	Rig Service + Ch. B.O.P.
		2 ⁰⁰	4 ⁰⁰	Run In w/ Bit #25.
		4 ⁰⁰	5 ⁰⁰	Break Circ. - Clean 10' To Bottom.
		5 ⁰⁰	8 ⁰⁰	Dr. 1/2 8 3/4 Hole w/ Bit #25.
		8 ⁰⁰	12 ³⁰	DRILLING
GEL	1000#	12 ³⁰	1 ⁰⁰	RIG SERVICE + B.O.P.
ELZANAL.	50#	1 ⁰⁰	4 ⁰⁰	DRILLING
CANSTIC	50#			
		4 ⁰⁰	4 ⁴⁰	DRILLING
		4 ⁴⁰	5 ⁰⁰	RIG SERVICE
GEL	2400	5 ⁰⁰	5 ³⁰	RUN SURVEY @ 6275
ELZAN	100	5 ³⁰	12 ⁰⁰	DRILLING

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING COMMENTS

DESILTER DATA																		
IK TH	TIME	FLOW	UNITED	OVER	WIS	W	V	Y	W	W	W	W	W	W	W	W	W	
	1 CAL	LINE	FLOW	FLOW														
5210	33	9.4	10.4	9.4	75												33	
5280	33	9.2	10.4	9.2	75												31	
	60	9.4	10.4	9.3	73	42 1/2	27	31	10	25	9	6	40	100	3.1		33	
	60	9.5	10.1	7.4	72													30
	40	9.5	10.0	9.4	79													31
	45	9.5	9.9	9.4	82													29
6280	60	9.5	9.9	9.5	81													30
	60	9.5	9.9	9.5	78													30
	65	9.4	9.9	9.4	75													29
6340	44	9.5	9.9	9.5	85	42 1/2	26	32	10	20	8.8							28

WATER + STABILIZER DATA			
W	H	HRS TO ARR	CH. WTS
W	9049	—	91 1/2
W	9832	—	136 1/4
W	9027	17 3/4	218 1/2
W	453	17 3/4	253 1/2
W	451	17 3/4	277 1/2
W	9028	—	325 3/4
C.	5124	—	194 1/2
C.	66452	—	194 1/2

CHRISTENSEN	W. ROBERTSON	CHILKOT
ISLAND	STABILIZERS	FOR WATER
#	11000	0.11
45	259 1/2	3 23/32 +
453	24 3/4	0 23/32


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACT NO. **60** RIG NO. **14**

FIELD **WILDCAT** WELL NAME _____ ISD _____ SEC _____ TWP _____
 DRILLING DEEPENING COMPLETING **E. 202016 I-3**
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **Nov 30 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS D.P.	NO 59	5574.04 FT	NO 59	5574.04 FT	NO	5637.33 FT
SINGLE D.P.	NO 2	632.9 FT	NO 2	632.9 FT	NO	
X-OVER SUB O.D.		154 FT		154 FT		154 FT
OTHER O.D.						
DRILL COLLARS O.D.						
DRILL COLLARS 7 O.D.	NO 16	495.04 FT	NO 16	495.04 FT	NO	495.04 FT
REAMER #9027 NEAR BIT O.D.	KIND	515 FT	KIND	515 FT	KIND	515 FT
STABILIZER #45 O.D.	KIND	460 FT	KIND	460 FT	KIND	460 FT
BLADE #45B O.D.	KIND	460 FT	KIND	460 FT	KIND	460 FT
BUMPER SUR						
BIT OR CORE BARREL						
TOTAL D.P. & TOOLS		6148.26 FT		6148.26 FT		6148.26 FT
KELLY DOWN (BELOW R.B.)		1430 FT		2.6 FT		4000 FT
DEPTH OF TOOLS		6163.06 FT		6174.26 FT		6188.26 FT

TOUR 1
See

TOUR 2
Caustic

TOUR 3
Gen

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	6163 FEET	6174 FEET	6188 FEET
DEPTH START OF TOUR	6161 FEET	6163 FEET	6174 FEET
FOOTAGE DRILLED	2 FEET	11 FEET	14 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP S.P.M. P.S.I.	/				56	56	56	56	56	56	56	56
ROTARY SPEED R.P.M.					T	50	50	50	50			
WEIGHT ON BIT M.lbs					R	40	40	40	40			
MUD WEIGHT lb/gal					I	7.5	7.5	7.4	7.5			
VISCOSITY sec/qt					P	70	73	66	76			
W.L.F.C. cc/32nd	/				56	56	60.2	60.2				
pH					8.5	8.5						
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES (IN I.D.)	TOTAL HOURS	FROM	TO	BIT CONDITION
73	8 3/8	32502	HW	3-9				
74	8 3/8	27790	HW	3-9				

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
					Time	AM	PSI	AK
TYPE		PREFLOW	mins	FHP	ps	FHP	ps	Time
FROM		ISI	mins	FHP	ps	FHP	ps	Mud Wt
TO		VO	mins	ISI	ps	GTS	mins	Visc
Recovery		FSI	mins	FSIP	ps	ETS	mins	AV
HOURS		RECOVERY			ps	ETS	mins	PV

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	G. SOERGREN	P. M. THORNTON	A. HAST
DERRICKMAN	J. PEDERSEN	Ed LANGMUIR	J. PARKER
HELPER	R. ROGERS	Don COLLINS	J. SCHENK
HELPER	L. NICKWAT	J. MACKNACK	A. ALEX
HELPER	L. CHERNIDSKI		G. GARRETT
FIREMAN			
TOOL PUSHER			

TOUR REPORT

FIELD WID CAT WELL NAME E. Porcupine 1-13 CONTRACTOR G.P. Drilling RIG NO 14
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING AT MIDNIGHT MAR 30 19

SOBC
 Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS D.P.	NO 59 557443 FT	NO 59 557404 FT	NO 59 563733 FT
SINGLE D.P.	NO	NO 1 3180 FT	NO 2
X OVER SUB O.D.	124 FT	154 FT	154 FT
OTHER O.D.			
DRILL COLLARS 7 O.D.	16 49504 FT	16 49504 FT	49504 FT
DRILL COLLARS O.D.	NO	NO	NO
REAMER O.D.	KIND	515 FT	515 FT
STABILIZER O.D.	KIND		
JARS	KIND		
PUMPER SUB			
BIT OR CORE BARREL	7183 FT		
TOTAL D.P. & TOOLS	614284 FT	610757 FT	613906 FT
KELLY DOWN BELOW R.B.	1105 FT	2200 FT	2200 FT
DEPTH OF TOOLS	615389 FT	613257 FT	616106 FT

TOUR
 TOUR 2
 TOUR 3
 KELZAN AL
 CHASTIC
 DOWICIDE
 GEL

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	6153 FEET	6132 FEET	6161 FEET
DEPTH START OF TOUR	6143 FEET	6130 FEET	6132 FEET
FOOTAGE DRILLED	10 FEET	2 FEET	29 FEET

DAY WORK	HOURS				HOURS				
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM
PUMP S.P.M.	4600	4600			561500	561500	561600	561600	
ROTARY SPEED R.P.M.	85	85			T 52	52	52	52	
WEIGHT ON BIT M lbs	12	12			Y 10	10	35	35	
MUD WEIGHT lb gal	9.1	9.4			P 9.2	9.2	9.4	9.3	
VISCOSITY sec qt	75	75			87	77	79	75	
W.L.F.C. cc 32nd		2.8			5.4	5.4	5.4	5.4	
pH		8			8.5	8.5	8.5	8.5	

NO.	SIZE	SERIAL	BIT KIND AND TYPE	BIT SIZES IN IN.	TOTAL FEET IN	START TIME	STOP TIME	REMARKS
23	6 3/16	7813	◇	None	6 1/2	6130	6153	23 3.5
23	8 3/4	30502	H.W. XDV	2-10 1-9	124	6130		

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEERS REPORT
TYPE	◇	PREFLOW	mins	1.0 P	
FROM	6130	LSI	mins	1.0 P	
TO	6153	VO	mins	1.0 P	
Recovery	22.7	FSI	mins	1.0 P	
HOURS	6 1/2	RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLMAN	FRASER	G. Sodergren	A. NAST
HELPER	FRASER	J. Pedersen	E. LANGMIR
HELPER	VALIQUARTE	R. Rogers	F. JUDSON
HELPER	PINA	L. Nycholat	J. MACKNAR
HELPER	COX	L. Chernipeski	G. GARATT
FILEMAN			
TOOL PUSHER	A. Riquelme		

SOBC WM & PORCUPINE YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURS OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	3:00	CUTTING CORE #4
		3:00	3:15	R2 GRP.
		3:15	4:45	CUTTING CORE #4
		4:15	5:00	BLOW KICK, TAKE D/KELLY, HOSE
		5:00	8:00	HOIST CORE #4
TOUR 2		8:00	9:00	Finish Hoisting Core #4
		9:00	10:30	Recover Core + Service Core Barrel
		10:30	11:30	Lay Down Barrel.
		11:30	12:00	Change Cutters + Pins Near Bit Reamer.
		12:00	2:45	Cut + Slip Line.
		2:45	3:30	Rig Service + Ch. B.O.P's. Rig Savers.
		3:30	4:00	Run In w/Bit #2.
TOUR 3		4:00		Break Core Tag Top Rat Hole.
				Reaming Rat Hole 6130.
	KELZAN AL 150#			
	CAUSTIC 50#	4:00	8:15	REAMING RAT HOLE
	Dowicide B 10#	8:15	8:45	RIG SERVICE, CHECKED B.O.P.'s,
	GEL 200#	8:45	9:15	PUMPS, SWIVEL, KELLY LOCK
		9:15	10:15	REAMING TO 6153
		10:15	12:00	WORK PAST DIAMOND BIT
				DRILLING

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

DESIGNED DOWN THE REAMERS

2 1/2" DATA

CORE #4 613 1000 1000 1000

WEIGHT OF CORE # 700 LBS

RECOVERED CORE TGE CUT

RECOVERED CORE 4 613 1000

CHANGE PENETRATION RATE: 3.5

RPM: 55

30 RPM

10	15	10	12	10	7	7	5	3	5
5	3	12	25	18	17	15	10	15	10
10	12	17							

AT CONNECTION AT 3153 CORE BARREL BEING USED FOR THE FIRST TIME. HAVE TO USE THE CORE AND THE CORE IS BEING USED FOR THE FIRST TIME. WORKING NOT RE-OPERABLE. CORING. THE CORE IS BEING USED FOR THE FIRST TIME. LEFT THE BARREL

RECORDED DATA

Kind	U	1/2" SURFACE	Depth (ft)	Area	Volume	Weight
Steel	4		31 1/2	1.51		240 LBS
Steel	4		36 1/4	1.68		245 LBS
Steel	4		39 3/4	1.80		245 LBS
Steel	4		43 1/2	2.00		245 LBS

SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD WILD CAT WELL NAME E. PORCUPINE 1-13 CONTRACTOR G.P. DALLING 14
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING AT MIDNIGHT MAR 29 1971 19

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO. <u>57</u>	<u>557404</u> FT	NO. <u>59</u>	<u>557404</u> FT	NO. <u>58</u>	<u>554266</u> FT
SINGLE	D.P.	NO.		NO. <u>1</u>	<u>3180</u> FT	NO. <u>2</u>	
X OVER SUB	O.D.		<u>154</u> FT		<u>154</u> FT		<u>154</u> FT
OTHER	O.D.						
DRILL COLLARS	O.D.		<u>49504</u> FT	<u>16</u>	<u>49504</u> FT	<u>16</u>	<u>49504</u> FT
DRILL COLLARS	O.D.	NO.		NO.		NO.	
REAMER # <u>9027</u>	O.D.	KIND <u>FRANK BIT</u>	<u>515</u> FT	KIND	<u>515</u> FT	KIND	
STABILIZER # <u>451</u>	O.D.	KIND <u>BLADE</u>	<u>460</u> FT	KIND	<u>460</u> FT	KIND	
JARS # <u>458</u>	O.D.	KIND <u>BLADE</u>	<u>460</u> FT	KIND	<u>460</u> FT	KIND	
BUMPER SUB							
BIT OR CORE BARREL							<u>7183</u> FT
TOTAL D.P. & TOOLS			<u>608497</u> FT		<u>611677</u> FT		<u>611107</u> FT
KELLY DOWN (BELOW R.B.)			<u>3305</u> FT		<u>1400</u> FT		<u>3205</u> FT
DEPTH OF TOOLS			<u>611802</u> FT		<u>613077</u> FT		<u>614312</u> FT
TOUR		MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		<u>6118</u> FEET		<u>6131</u> FEET		<u>6143</u> FEET	
DEPTH START OF TOUR		<u>6087</u> FEET		<u>6118</u> FEET		<u>6130</u> FEET	
FOOTAGE DRILLED				<u>13</u> FEET		<u>13</u> FEET	

DAY WORK	HOURS								
	2:00 AM	4:30 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:30 PM	6:00 PM
PUMP	<u>56/1700</u>	<u>56/1700</u>	<u>56/1700</u>	<u>56/1700</u>	<u>56/1700</u>	<u>53/1400</u>	<u>53/1400</u>		<u>46/900</u>
ROTARY SPEED	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>50</u>	<u>75</u>	<u>75</u>		<u>85</u>
WEIGHT ON BIT	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>	<u>40</u>		<u>12</u>
MUD WEIGHT	<u>9.6</u>	<u>9.5</u>	<u>9.5</u>	<u>9.5</u>	<u>9.5</u>	<u>9.5</u>	<u>9.5</u>		<u>8.6</u>
VISCOSITY	<u>68</u>	<u>65</u>	<u>68</u>	<u>68</u>	<u>75</u>	<u>77</u>	<u>80</u>		<u>83</u>
W.L.F.C.			<u>6.4</u>			<u>3.4/2.2</u>			<u>1/2 5.6</u>
p.H.			<u>8.8</u>		<u>8.0</u>	<u>8.5</u>			<u>8.5</u>

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES (IN.)	TOOTH HOURS	FROM	TO	DEPTH	REMARKS
<u>21</u>	<u>8 3/4</u>	<u>R2017</u>	<u>H.W. RGIX</u>	<u>3-10</u> <u>1-9</u>	<u>17</u>	<u>6064</u>	<u>6130</u>	<u>66</u>	<u>2.9</u> <u>1-3-2</u>
<u>22</u>	<u>6 1/4</u>	<u>7813</u>	<u>◇</u>	<u>NONE</u>	<u>8</u>	<u>6130</u>	<u>6130</u>	<u>13</u>	<u>6.5</u> <u>N</u>

CORE No.	DST No.	FR (M)	TO	MUD ENGINEER'S REPORT	
				W.C.	W.P.
				<u>7.5</u>	<u>12/23</u>
				<u>7.5</u>	<u>7.0</u>
				<u>37 1/2</u>	<u>8.5</u>
				<u>23</u>	<u>5.0</u>
				<u>29</u>	<u>40/</u>

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<u>FRASKA</u>	<u>Sodergren</u>	<u>A. NAST</u>
DERRICKSMAN	<u>FRASKA</u>	<u>Pedersen</u>	<u>E. LANGMIR</u>
HELPER	<u>VALQUETTE</u>	<u>Rogers</u>	<u>F. JUDSON</u>
HELPER	<u>KINK</u>	<u>Nycholat</u>	<u>J. MACKNAK</u>
HELPER	<u>COX</u>	<u>Gheraspaki</u>	<u>R. COX</u>
FIREMAN			
TOOL PUSHER	<u>D. Ryankamp</u>		

Get #2
 MEZAN
 2-1 stream
 TOUR 2
 Come down
 Gel
 Caustic
 Kelzan
 2 Stream w

TOUR 3
 DECKER
 Come

Kind
 Near bit
 Near bit
 Near bit
 20' W.C.
 20' W.C.

2°
 Note

LOG WM. E. KORCUPINK Y 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE		
9	Kind	Amount	12:00	12:45	Drilling Rig Ser. Change Head in #1 Pump Drilling	
6	TOUR		12:45	2:15		
FT	Gel #2000	2200	2:15	3:40		
FT	MELZAN #90	50				
4	FT	1/2" Stream of Water				
FT						
FT						
FT	TOUR 2					
FT	Slime Alum	50	8:00	8:30	Rig Service ch. B.O.P.	
FT	Gel	2200#	8:30	9:00	Drlg.	
FT	Caustic	100#	2:00	3:00	Drop Survey - Blow Kelly.	
3	FT	Kelzan	150#	3:00	4:00	Hoisting Bit #21.
7	FT	1/2" Stream Water				
5	FT					
2	FT	TOUR 3	4:00	6:15	HOIST BIT # 21, LAID DOWN TWO STABILIZERS, ONE THREE FT. REAMER.	
FEET			6:15	6:30	RIG SERVICE, CHECKED RAMS	
FEET			6:30	7:15	PICKED UP CORE ABL.	
FEET			7:15	9:15	RUN IN W/ CORE ABL.	
HOURS			9:15	10:00	CIRCL CLEAN OUT TO BTM. 10 FT.	
2:00 PM			10:00	12:00	CUTTING CORE #4	

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING FISHING SUMMARY

DESIGNER DATA
 Unchecked 10.2
 Overhaul 9.5

Reamer AND STABILIZER DATA

Kind	#	H.C. TODAY	W.H. HRS.
Neck Bit	9029	—	91 1/2
Neck Bit	9830	—	136 1/4
Neck Bit	9027	15	182 3/4
BLADE	453	17	220 3/4
BLADE	451	17	249 1/2
STABILIZER	9028	—	315 3/4
10 W.C.	51124	—	194 1/2
30 W.C.	46452	—	194 1/2

Time	Time	Time
10:00	10:00	10:00
10:00	10:00	10:00
10:00	10:00	10:00

RESISTIVITY HOW FILTRATE 2 KHS 3.00 7.00

Note: Bit #21 Core cut volume increased to 25 feet per hour
 For reamer bit one foot per hour

Signature COMPANY ENGINEER

TOUR REPORT

FIELD Wild Cat WELL NAME F. P. P. 1-13 CONTRACTOR G.P. Drilling RIG NO. 14
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT Mar. 28/71 19

508C
 MUD and CHEMICAL Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO	527404 FT	NO 59	557404 FT	NO 58	554227 FT
SINGLE	D.P.	NO				2	
X-OVER SUB	O.D.		154 FT		154 FT		154 FT
OTHER	O.D.						
DRILL COLLARS	7 O.D.	14	42506 FT	16	47504 FT	16	49504 FT
DRILL COLLARS	O.D.	NO					
REAMER #9027	O.D.	KIND	515 FT		515 FT		515 FT
STABILIZER Blade #451	O.D.	KIND	460 FT		460 FT		460 FT
Blade #458	O.D.	KIND	460 FT		460 FT		460 FT
BUMPER SUB							
BIT OR CORE BARREL							
TOTAL D.P. & TOOLS			602499 FT		608497 FT		605320 FT
KELLY DOWN (BELOW R.B.)			4000 FT		4000 FT		2400 FT
DEPTH OF TOOLS			606499 FT		606497 FT		608720 FT

TOUR 1
 TOUR 2
 Trip.
 TOUR 3
 GEL
 KELZAN

DAY WORK	MORNING TOUR						DAYLIGHT TOUR						AFTERNOON TOUR					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:30 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.						
PUMP	5 1/16						5 1/16						5 1/16					
ROTARY SPEED	50						50						44					
WEIGHT ON BIT	35						35						35					
MUD WEIGHT	8.2						9.5						9.5					
VISCOSITY	72						64						68					
W.L.F.C.	6.0/32						6.0/32						5.2					
p.H.	8.5						8.5						8.5					

DESULTEC
 LEANER

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
20	8 3/4	247087	H77	2-10 1-9	5 1/4	6046	6064	18	3-4
21	8 3/4	RT017	H.W. RG1X	2-9	5	6064	6087	23	Drilling

Kind
 New Bit
 New Bit
 New Bit

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT						
TYPE		PREFLOW	mins	IHP	psi	IFP	psi	Time	AM	AK	0.15
FROM		ISI	mins	FHP	psi	FFP	psi	Mud Wt	9.5	Int. Gel	5/18
TO		VO	mins	ISIP	psi	GTS	psi	Visc	70	W.L.F.C.	6.1
Recovery		FSI	mins	FSIP	psi	ETS	psi	AV	35 1/2	PH	9.0
HOURS		RECOVERY						PV	28	Sum	3

BLADE
 BLADE
 10 W.C.
 30 W.C.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	<u>FRASER</u>	<u>Sobangren</u>	<u>A. NAST</u>	Kind	Depth	Reading
DERRICKMAN	<u>FRASER</u>	<u>Patansem</u>	<u>E. LANGGARA</u>	Drilled	6063	
HELPER	<u>Calliquitta</u>	<u>Rogers</u>	<u>F. JORDAN</u>	Drilled	6064	1 1/4
HELPER	<u>FRASER</u>	<u>Nyckelab</u>	<u>J. PINENAK</u>			
HELPER	<u>COX</u>	<u>Chernipaskii</u>	<u>L. GHERMARENIE</u>			
FIREMAN						
TOOL PUSHER	<u>D. ...</u>					

NOTE

SOBC WM L. FOREPINE YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	12:30	Put on Kelly Hosi, Brake Ctl
		12:30	1:05	CHANGE FOR VALVE ON #1 PUMP, RIG S&K.
		1:10	2:00	Running to 6th 20ft.
		2:00	7:10	Drilling
		7:15	7:30	SUSP. @ 60.65
		7:30	8:00	THAW OUT RAT HOLE
TOUR 2		8:00		Finish Thaw Out Rat Hole
			9:30	Clear Out Oilers In Compounds &
			9:30	Get Some Working, Servicing Rig.
	Trip	9:30	12:30	Missing Bit # 20-21 Wct 52ds.
		12:30		Change Pins In Reamer
				Pick Up U.C. # 576 - # 504.
			1:10	Make Up Bit # 21 To Run In.
		1:30	4:00	Running In w/Bit # 21 To 4000.
TOUR 3				
	GEL. 11M #	4:00	4:15	BIG SERVICE
	Kelzan AL 50 #	4:15		FINISH IN W/ BIT # 21
			6:00	THAW OUT BRIDGE @ APPROX 4389
		6:15	7:00	CLEAR OUT 40 FT. TO BTM.
		7:00	12:00	DRILLING

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

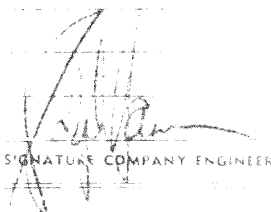
DESIGNER DATA

UNDERFLOW: 10.4 @ 40 SEC/gal
 OVERFLOW: 9.4

REAMER - STABILIZER DATA

Kind	#	Hrs. Run	Wct. Hours
Neck BIT	9049	—	21 1/2
Neck BIT	9830	—	186 1/4
Neck BIT	9027	10 1/6	170 3/6
BLADE	453	10 1/6	218 3/6
BLADE	451	10 1/6	237 1/2
L. SHAW	9028	—	345 3/4
10 U.C.	51124	—	106 1/2
30 U.C.	66052	—	106 1/2

NOTE: IN THE IN W/ BIT # 21 FOUND BRIDGE AT 4400. CIRCULARS MADE


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P**

RIG NO **14**

FIELD **WIDCAT** WELL NAME **Paragon 1-1200**

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

RE-DRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

19

508?
M.D. and E. CHEMIC
Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS D.P. NO 53	567926 FT	NO 59 557474 FT	NO 557404 FT
SINGLE D.P. NO 7	6315 FT		
X OVER SUB O.D.	154 FT	154 FT	151 FT
OTHER O.D.			
DRILL COLLARS 7 O.D. 14	43506 FT	14-7" 43506 FT	43506 FT
DRILL COLLARS O.D.			
REAMER #907 O.D. KIND 515	515 FT	515 FT	515 FT
STABILIZER BLADE #31 O.D. KIND 460			460 FT
BLADE #458 O.D. KIND 460			460 FT
BUMPER SUB			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	598426 FT	601579 FT	602499 FT
KELLY DOWN (BELOW R.B.)	2600 FT	3021 FT	2101 FT
DEPTH OF TOOLS	601026 FT	604600 FT	604600 FT
TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	6040 FEET	6046 FEET	6046 FEET
DEPTH START OF TOUR	6040 FEET	6040 FEET	6046 FEET
FOOTAGE DRILLED	0 FEET	6 FEET	0 FEET

	HOURS				HOURS				HOURS			
	200 AM	400 AM	600 AM	800 AM	1000 AM	1200 AM	200 PM	400 PM	600 PM	800 PM	1000 PM	1200 PM
PUMP sp.m p.s.i.	/											
ROTARY SPEED R.P.M.	/											
WEIGHT ON BIT M.lbs	/											
MUD WEIGHT lb/gal	/											
VISCOSITY sec/qt	/											
W.L.F.C. c.c. 32nd	/											
pH	/											
MUD LEVEL IN TANKS Ft. Ins	/											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
19	8 3/4	30442	X DV	3-7	3 1/2	6040	6046	6	24 8-4-0
20	8 3/4		H 77C	3-8					(Also Reamer 6007-6040 in 6 3/4 hrs)

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
					Time	Mud Wt.	Visc.	A.V.
					8:30 AM	9.4	55	36

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	FRASER	Sodergran	A HAST			
DERRICKMAN	FRASER	Palomares	G LANGMUR	DROPPED	6002	2°
HELPER	VALQUETH	Rogers	F JUDSON			
HELPER	RINE	Nycholat	J BLACKMAN			
HELPER		Chennipaski	M RINE			
FIREMAN						
TOOL PUSHER	D. Rigney					

TOUR
TOUR 2
Gel
Kalan
Doseme "B"

TOUR 3
DESIGER
Kamer + Sm

NEAR BIT
NEAR BIT
NEAR BIT
BLINE
BLINE
CUSHION
10' D.C.
30' D.C.

NOTE:
B
C
P
1 +

SOBC WM EAST PHILIPPINE VI 1-13

MUD and CHEMICALS ADDED			OTHER HOURLY OPERATING DETAIL	
Kind	Amount	From	To	WORK DONE
TOUR 1		1:30	1:45	5 1/2" CUT DRILLING + RIG SER.
		1:45	5:00	RUN IN TO BEAM
		5:00	5:30	PUT ON Kelly HOSE + BRACK CIRC
		5:30	6:30	BEAM TO TOP OF RAT HOLE
		6:30	8:00	BEAM RAT HOLE
TOUR 2		8:00	8:30	Reaming Rat Hole.
Ccl	1500	8:30	9:00	Rig Service Ch. B.O.P.
Kelzan	150	9:00	12:45	Reaming Rat Hole To 6040.
Dosene "B"	10	12:45		Drlg. 8 3/4" Hole w/ Bit #19.
TOUR 3		4:00	4:45	CIRC. SAMPLE
		4:45	5:00	RIG SERVICE
		5:00	8:00	HAULT BIT # 19
		8:00		CHECK BLIND RAMS, CHANGE BITS,
				PICK UP TWO STABILIZERS, REPLACE
			4:30	SWAP UP LINE (TONGS)
		9:00	12:00	RUN IN w/ BIT # 20

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DESILTER DATA

UNDERFLOW: 10.1 @ 1 gal / 45 sec
 OVERFLOW: 9.6

REAMER + STABILIZER DATA

Kind	#	Wks. Run	Lim. Hours
NEAR BIT	9019	—	91 1/2
NEAR BIT	9830	—	186 1/4
NEAR BIT	9027	9 1/4	160 1/2
BLADE	458	—	208 1/2
BLADE	451	—	227 1/4
CUSHION	9028	—	345 3/4
10' D.C.	51124	—	104 1/2
30' D.C.	66452	—	194 1/2

NOTE: BIT # 19 WAS RUN STRICTLY TO BEAM RAT HOLE IN PREPARATION FOR CORING. CARTERS SUBSEQUENTLY CHANGED TO DRILL THROUGH TO HARDNESS. BIT PULLED AFTER 6' NEW HOLE DUE TO EXCESSIVE TORQUE. BIT WAS 1+ INCHES UNDER GANGE.

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

GP

RIG NO

14

FIELD WILCOAT

WELL NAME

LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

EAST 15.000 DE J-13

March 26

1971

MUD and CHEMICAL Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO 58	547936 FT	NO 58	547936 FT	NO 58	547936 FT
SINGLE	D.P.	NO		NO 1	3138 FT	NO 1	3138 FT
X-OVER SUB	O.D.		154 FT		154 FT		154 FT
OTHER	O.D.						
DRILL COLLARS	7 O.D.	14	43506 FT	14	43506 FT		43506 FT
DRILL COLLARS	O.D.	NO.		NO		NO	
REAMER	O.D.	KIND		KIND		KIND	
STABILIZER	O.D.	KIND		KIND		KIND	
JARS			645 FT		645 FT		645 FT
BUMPER SUB.							
BIT OR CORE BARREL			6458 FT		6458 FT		6458 FT
TOTAL D.P. & TOOLS			598779 FT		601837 FT		601837 FT
KELLY DOWN (BELOW R.B.)			36 FT		1763 FT		2163 FT
DEPTH OF TOOLS			602399 FT	0	603600 FT	*	604000 FT
TOUR		MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		6023 FEET		6036 FEET		6040 FEET	
DEPTH START OF TOUR		6020 FEET		6023 FEET		6036 FEET	
FOOTAGE DRILLED		3 FEET		13 FEET		4 FEET	

TOUR 1
TOUR 2
Gel
Kelzan
Cosmic
Dewacide
3400 Feet

TOUR 3

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 P.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	s.p.m. p.s.i.		44	750	47	750	47	750	44	750	44	750
ROTARY SPEED	R.P.M.		80	80	70	70	80	80	80	80	80	
WEIGHT ON BIT	M lbs.		12	12	12	12	12	12	12	12	12	
MUD WEIGHT	lb/gal		9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	
VISCOSITY	sec/qt		69	68	67	62	59					
W.L./F.C.	c.c./32nd											
p.H.						9.0	9.5					
MUD LEVEL IN TANKS	Ft-Ins					32						

MUD	+	Descr
9.5	6026	35
11		40
1		40
3		40
5	6034	45

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT-HR	BIT CONDITION
18 b	6 7/8	70-14	D	Bowles	138	6020	6040	3	167

6026 = 3

CORE No.	No.	DST No	FROM	TO
3				
TYPE		PREFLOW	mins	I.H.P.
FROM	6020	ISI	mins	F.H.P.
TO	6040	V.O.	mins	ISIP
Recovery	13.6	FSI	mins	FSIP
HOURS	12 1/2	RECOVERY		

MUD ENGINEER'S REPORT			
Time	A.M.	P.M.	Air
Mud Wt			To Mud
Visk			W.L.F.C.
A.V.			p.H.
P.V.			Sand
V.P.			C.A. p.p.m.
			C.L. p.p.m.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FARSAT	SOXENGRON	A. NAST
DERRICKMAN	FARSAT	PERENSEN	E. LANGMUIR
HELPER	VALQUETTE	ROGERS	F. JUDSON
HELPER	KOBE	NICHOLSON	J. MACKNAK
HELPER		CHANDRICKI	M. RING
FIREMAN			
TOOL PUSHER			

DEVIATION RECORD		
Kind	Depth	Reading

SORC WILSON RECORDER YT I-13

071
R
6 FT
8 FT
4 FT
6 FT
6 FT
5 FT
8 FT
7 FT
3 FT
0 FT
EET
EET
EET
HOURS
00 P.M.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	1 ¹⁵	MAKE UP CORE BB14 RUN IN D/C
		1 ¹⁵	2 ⁰⁰	Rig SERV W/AT on D/WAT OIL PUMP.
		2 ⁰⁰	3 ⁴⁵	RUN IN W/CORE BB1
		3 ⁴⁵	4 ¹⁵	PAI N KELLY HOSE, BRAKE CIRC
		4 ¹⁵	6 ¹⁵	CLEAR BRIDGE @ 3910 & CLEAN 100' TO 8TH
		6 ¹⁵	6 ³⁰	CIRC WITH
		6 ³⁰	8 ⁰⁰	CUTTING CORE #3
TOUR 2		8 ⁰⁰	10 ¹⁵	Cutting Core #3
Gel	500#	10 ¹⁵	11 ⁰⁰	Rig Service Ch. B.O.P.
Kelzan	150#	11 ⁰⁰	11 ²²	Service Pump Rod Packing
Caustic	50#	11 ²²	12 ⁰⁰	Going Back To Bottom of Barrel.
Dewacide	10#	12 ⁰⁰	4 ⁰⁰	Cutting Core #3.
3420 FORT	50#			
TOUR 3		10 ⁰⁰	7 ¹⁵	CUT CORE #3
		7 ¹⁵	7 ³⁰	RIG SERVICE
		7 ³⁰	10 ³⁰	HOIST CORE
		10 ³⁰	12 ⁰⁰	RECOVER CORE, BOX SAME LAY DOWN CORE BBL.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + RESULTS WILSON

Time	Wt	Time	Flow	Wt	Over	Wt	Wt	Wt	Wt	Wt	Wt	Wt	Wt	Wt	Wt	Wt	Wt
9:00	6326	35	9.5	10.0	9.5	52	27 1/2	19	21	9	17	9.0	8.3	10	100	0.15	42
11		40	9.5	10.0	9.5	69											43
1		40	9.5	10.0	9.5	63											43
3		40	9.5	10.0	9.5	63											49
5	6334	45	9.6	9.9	9.5	63											50

Core #3 (W4) - (W40) FOR MASSIVE ... 32-17
 Core #3 ... 466 ...
 ... 1.67 ...
 ... 80 ...
 ... 23.2 ...

Reading

15	25	30	35	38	45	46	704	20
45	41	35	33	30	25	28	42	29

30
 25%
 ...
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Dilling* RIG NO *14*

FIELD *WIDCAT* WELL NAME *L. Poyaris* ~~1-13~~ SEC TWP Rur W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *Mar 28/71* 19

SORC
MUD and CHEMICAL Kind

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P.	NO.			FT	NO.			FT	NO.			FT
SINGLE	D.P.	NO.			FT	NO.			FT	NO.			FT
X-OVER SUB	O.D.	<i>XOS</i>			<i>80</i> FT				<i>80</i> FT				<i>154</i> FT
OTHER	O.D.				FT				FT				FT
DRILL COLLARS	O.D.	<i>14</i>			<i>43506</i> FT	<i>14</i>			<i>43506</i> FT				<i>43506</i> FT
DRILL COLLARS	O.D.	NO.			FT	NO.			FT	NO.			FT
REAMER	O.D.	KIND			FT	KIND			FT	KIND			FT
STABILIZER	O.D.	KIND			FT	KIND			FT	KIND			FT
JARS		KIND			<i>645</i> FT	KIND			<i>645</i> FT	KIND			FT
BUMPER SUB		KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					<i>6458</i> FT				<i>6458</i> FT				<i>7183</i> FT
TOTAL D.P. & TOOLS					<i>598779</i> FT				<i>598779</i> FT				<i>598779</i> FT
KELLY DOWN (BELOW R.B.)					<i>3000</i> FT				<i>3000</i> FT				<i>3305</i> FT
DEPTH OF TOOLS					<i>601779</i> FT				<i>601779</i> FT				<i>602074</i> FT

TOUR 1
TOUR 2
Gal Kelzan
TOUR 3

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	
DEPTH END OF TOUR					<i>6002</i> FEET					<i>6017</i> FEET			
DEPTH START OF TOUR					<i>6002</i> FEET					<i>6002</i> FEET			
FOOTAGE DRILLED					<i>15</i> FEET					<i>15</i> FEET			<i>3</i> FEET

PUMP	S.P.M. P.S.I.	HOURS				HOURS							
		2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
						<i>42</i>	<i>42</i>	<i>42</i>	<i>42</i>	<i>42</i>			
						<i>700</i>	<i>700</i>	<i>700</i>	<i>700</i>	<i>700</i>			
ROTARY SPEED	R.P.M.									<i>85</i>			
WEIGHT ON BIT	M lbs.					<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>	<i>12</i>			
MUD WEIGHT	lb/gal					<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>			
VISCOSITY	sec/qt					<i>65</i>	<i>69</i>	<i>60</i>	<i>60</i>	<i>58</i>			
W.L./F.C.	c.c./32nd								<i>54</i>	<i>50.2</i>			
pH									<i>9.5</i>	<i>9.5</i>			

Mike Wesnick

TIME	DEPTH	READING
<i>10:00 AM</i>	<i>6002</i>	<i>35</i>
<i>12:00 PM</i>		<i>37</i>
<i>2</i>		<i>38</i>
<i>4</i>	<i>6017</i>	<i>33</i>
<i>6:00 PM</i>		<i>30</i>

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT HR	BIT CONDITION
<i>18</i>	<i>6 3/16</i>	<i>70-19</i>	<i>D</i>	<i>None</i>	<i>8 1/2</i>	<i>6002</i>	<i>6020</i>	<i>18</i>	<i>Good</i>

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
	DRILLER	DERRICKMAN	HELPER	DRILLER	DERRICKMAN	HELPER	DRILLER	DERRICKMAN	HELPER
	<i>FRASER</i>	<i>FRASER</i>	<i>VALIQUITA</i>	<i>Sodergren</i>	<i>Pedersen</i>	<i>Rogers</i>	<i>A. NAST</i>	<i>B. LANGMIR</i>	<i>F. JOHNSON</i>
			<i>RINA</i>			<i>L. Nycholat</i>			<i>J. MACKNAK</i>
			<i>AX</i>			<i>L. Akernipeski</i>			<i>R. COP</i>

DEVIATION RECORD		
Kind	Depth	Reading
<i>Knipped</i>	<i>6202</i>	<i>2'</i>

SOBC WH EAST Pennsylvania Y 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	1 ⁴⁵	HOIST TO 2000 STRAP OUT
		1 ⁴⁵	3 ³⁰	PICK UP CORE #2
		3 ³⁰	3 ⁴⁵	CHECK BLIND MAN'S, RIG SER.
		3 ⁴⁵	7 ⁰⁰	TRIP IN W/CORE #2
		7 ⁰⁰	8 ⁰⁰	PAT ON KELLY, HOSE BRAKE CARS
TOUR 2				
Gel	1000 ^{lb}	8 ⁰⁰	8 ⁰⁰	Rig Service & Ch. B.O.P.'s
Kelzan	200 ^{lb}	8 ⁰⁰	9 ⁴⁵	Clean 48' Fill To Bottom
		9 ⁴⁵	4 ⁰⁰	Cutting Core #2.
TOUR 3				
		4 ⁰⁰	6 ¹⁵	CUTTING CORE #2
		6 ¹⁵	6 ⁴⁵	RIG SERVICE, CHECKED R.O.P.'s
		6 ⁴⁵	10 ⁰⁰	1015' CORE
		10 ⁰⁰	12 ⁰⁰	RECOVER CORE, BOX SAME, LAY DOWN JARS, WAIT ON ORDERS CHECKED BLIND RIGS

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + MESSICK DATA

TIME	DEPTH	TIME 1 GAL	FLOW LINE	DRUMS USED	0.005 FLUID	VISC	API	W	YIP	Wt GEL	10 GEL	20	W.L.	24	30	Pf	DRUM PRESS	RT
10:00 AM	6004	35	9.5	10.4	9.5	69	29 1/2	15	23	8	13	9.0	60	40	100	72	38	3.5 @ 74°
12:00 PM		37	9.5	10.1	9.5	68						7.0					35	
2		38	9.5	10.1	9.5	67						9.0					33	
4	6017	33	9.5	10.1	9.5	62						9.0					30	
6:00 PM		40	9.5	10.0	9.4	58						9.0	5.0				49	

Core # 2 6002-6030

Boxed bit # 20-17

Estimated weight 76E C17

Core Core # 2 in 3' and 1' ...

Assemble Penetration Rate: 202

" WPM 35

WPM 330 gpm

Low ...

...

18 37 18 27 25 25 23 18 29

30 20 22 37 31 30 30 120

...

...

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

RIG NO 14

FIELD 6410 CAT WELL NAME E. PORCUPINE SEC 1-13 TWP

Rge W 19

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT MARCH 24/91

5015C

MID. and CHEMICAL Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS D.P.	NO 57	538513 FT	NO 57	599455 FT	NO 58	551044 FT
SINGLE D.P.	NO 2	6286 FT	NO 1	3138 FT	NO 1	FT
X-OVER SUB O.D.		154 FT	57	597930 FT		154 FT
OTHER O.D.		FT		154 FT		FT
DRILL COLLARS 7" O.D.	14	43506 FT	14	43506 FT		43506 FT
DRILL COLLARS O.D.	NO	FT	NO	FT	NO	FT
REAMER 9027 O.D.	KIND 1557	515 FT	KIND	515 FT	KIND	515 FT
STABILIZER 4580 D	KIND BLADE	462 FT	KIND	462 FT	KIND	462 FT
JARS 5748 9028	KIND Cushman	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB		FT		FT		FT
BIT OR CORE BARREL		FT		596280 FT		FT
TOTAL D.P. & TOOLS		590005 FT		596250 FT		596250 FT
KELLY DOWN (BELOW R.B.)		38 FT		2220 FT		4005 FT
DEPTH OF TOOLS		593805 FT		598500 FT		600255 FT
TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		5938 FEET		5985 FEET		5985 FEET
DEPTH START OF TOUR		5868 FEET		5938 FEET		6002 FEET
FOOTAGE DRILLED		70 FEET		47 FEET		17 FEET

DAY WORK	HOURS											
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP S.p.m. P.S.I.	52 1400	52 1400	52 1400	52 1400					52 1400	52 1400		
ROTARY SPEED R.P.M.	60	60	60	60	60	60	60	60	60	60		
WEIGHT ON BIT M.lbs.	35	35	35	35	28	28	28	28	30	30		
MUD WEIGHT lb/gal	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.4	9.5	9.6		
VISCOSITY sec/qt	47	47	47	47	47	54	56	59	53	52		
W.L./F.C. c.c./32nd				5.4				5.4	5.4	5.4		
p.H.				8.0				8.0	9.5	9.5		
MUD LEVEL IN TANKS Ft. Ins.												

NO.	SIZE	SERIAL	BIT KIND & D TYPE	JET SIZES IN 32	TOTAL HOURS	FROM	TO	FT. HR	BIT CONDITION
17	8 3/4	341104	M44	2-10 1-9	33 1/2	571	622	301 79	FLATTING

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT						
					PREFLOW	min	F.P.P.	PSI	Time	8:00 AM	PAK
					ISI	min	F.P.P.	PSI	9.4	Int. Gel	5/13
					VO	min	ISI.P	PSI	47	W.L.F.C.	5.6
					FSI	min	FSI.P	PSI	25	p.H.	9.3
					RECOVERY			PSI	16	Sound	7

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	FASER	G. SWENSON	A. NAST	Line	5930	2°
DERRICKMAN	FASER	J. JOHNSON	E. LANGMUIR	TRIP	6002	2°
HELPER	VALQUETTE	R. JOHNSON	J. JOHNSON			
HELPER	KINE	J. JOHNSON	J. DRAGMAN			
HELPER	10X	L. CHERNIECKI	L. CHERNIECKI			
FIREMAN						
TOOL PUSHER						

TOUR 1
TOUR 2
TOUR 3

7:00 AM
12:00 PM
2
4
6
8
10
12:00 PM
2
4
6
8

5938
5985

Kind
NEW 47
NEW 61
BLADE
BLADE
CUSHION
10" DC
130" DC

SOBC WH EAST PORCUPINE YT 1-73

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
9		12 ⁰⁰	12 ⁴⁵	Circ Sample
JR	TOUR 1	12 ⁴⁵	1 ¹⁵	Drilling
4 FT		1 ¹⁵	1 ³⁰	Rig Service
FT		1 ³⁰	8 ⁰⁰	Drilling
4 FT				
FT				
6 FT				
FT				
5 FT	TOUR 2	8 ⁰⁰	8 ³⁰	Drlg.
2 FT		8 ³⁰	9 ⁰⁰	Survey 5930-2°
9 FT	Kuzaw	9 ⁰⁰	9 ³⁰	Rig Service Ch. B.O.P.
FT	Gel	9 ³⁰	12 ⁰⁰	Drlg.
FT		12 ⁰⁰	12 ¹⁵	Blow Out Ch.
0 FT		12 ¹⁵	2 ¹⁵	Drlg.
5 FT		2 ¹⁵	2 ³⁰	Service Oiler's Compounds.
5 FT	TOUR 3	2 ³⁰	4 ⁰⁰	Drlg.
FEET		4 ⁰⁰	7 ⁰⁰	DRILLING
FEET		7 ⁰⁰	7 ¹⁵	RIG SERVICE
FEET		7 ¹⁵	8 ⁴⁵	Circ. To Core
HOURS		8 ⁴⁵	9 ⁰⁰	DRG SURVEY @ 6002
2 00 P.M		9 ⁰⁰	9 ¹⁵	UNTHAW RAT HOLE
		9 ¹⁵	12 ⁰⁰	HEIST TO CORE, (STEAD OUT)

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + DESALTER DATA

TIME	DEPTH	Time/Gal	Flow Line	UNDER FLOW	JOCK FLOW	WISC	W.C.	W.L.	INDEX OF REFRACTION
2:00 AM		35	9.4	10.1	9.4	47			
4		35	9.4	10.1	9.4	47	3.0	5.4	
6		30	9.4	10.1	9.4	47			
8	5938	37	9.4	10.1	9.4	47			
10		32	9.4	10.2	9.4	54			
12:00 J		32	9.4	10.1	9.4	53			
2		31	9.4	10.3	9.4	54	9.5	5.3	
4	5985	35	9.5	10.2	9.4	53	9.5	5.4	
6		35	9.6	10.7	9.5	52			
8		35	9.6	10.6	9.5	52			

ROTOR + STABILIZER DATA

Kind	#	WCS TOOTH	Com. HRS
NEAR BIT	9049	—	91 ¹ / ₂
NEAR BIT	9830	—	186 ¹ / ₂
NEAR BIT	9027	16 ¹ / ₂	151 ¹ / ₄
BLADE	458	16 ¹ / ₂	208 ¹ / ₂
BLADE	451	—	227 ¹ / ₄
CUSHION	9028	16 ¹ / ₂	345 ³ / ₄
10 D.C.	51124	—	194 ¹ / ₂
30 D.C.	66452	—	194 ¹ / ₂

MEASUREMENTS

S963.50
 SLM 596.6
 No correction to concentration.

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO **14**

FIELD **WIRE CAT** WELL NAME **E PORCUPINE 1-13** LSD

SEC TWP R. W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 23 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS .. D.P.	NO. 56 529132 FT	NO. 56 527132 FT	NO. 57 538513 FT
SINGLE .. D.P.	NO.	NO. 2 6356 FT	NO.
X-OVER SUB .. O.D.	154 FT	154 FT	154 FT
OTHER .. O.D.			
DRILL COLLARS .. 7" O.D.	NO. 14 43506 FT	43506 FT	43506 FT
DRILL COLLARS .. O.D.	NO.	NO.	NO.
REAMER .. 7027 O.D.	KIND DEARBIT 515 FT	KIND 515 FT	KIND 515 FT
STABILIZER .. 458 O.D.	KIND BLADE 462 FT	KIND 462 FT	KIND 462 FT
JARS TAB .. 9028	KIND CUSHION 569 FT	KIND 569 FT	KIND 569 FT
BUMPER SUB			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	574339 FT	580674 FT	583719 FT
KELLY DOWN (BELOW R.B.)	26 FT	15 FT	3081 FT
DEPTH OF TOOLS	576939 FT	582499 FT	586800 FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	5769 FEET	5824 FEET	5868 FEET
DEPTH START OF TOUR	5707 FEET	5769 FEET	5824 FEET
FOOTAGE DRILLED	62 FEET	52 FEET	58 FEET

DAY WORK	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	52 1400	✓	✓	52 1400	52 1400	52 1400	52 1400	52 1400	52 1400	52 1400	52 1400	52 1400
ROTARY SPEED	R.P.M. 60	✓	✓	60	60	65	65	60	60	60	60	60
WEIGHT ON BIT	M.lbs. 35	✓	✓	35	35	30	30	25	25	25	35	25
MUD WEIGHT	lb/gal 9.5	✓	✓	9.4	9.3	9.3	9.3	9.5	9.5	9.5	9.5	9.5
VISCOSITY	sec. qt 56	✓	✓	47	47	48	48	43	55	50	22	57
W.L.F.C.	cc 32nd 6.4	✓	✓			5.9						5.4
pH						8.						8.0
MUD LEVEL IN TANKS	Ft. Ins											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
17	8 3/4	541104	M188	2-19	7 1/4	5701	5868	167	BIT 16 167

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	FHP	ps	IFP	ps	Time	AM
FROM		ISI	mins	FHP	ps	FFP	ps	Mud Wt	FORM
TO		VO	mins	FSIP	ps	GTS	ps	VIN	W.P.
Recovery		FSI	mins	FSIP	ps	FTS	ps	AV	PH
HOURS		RECOVERY						P.V.	SPM

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	WIRELINE	5677	1 1/2
DERRICKMAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	WIRELINE	5775	1 3/4
HELPER	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>	WIRELINE	5838	1 1/2
HELPER	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>			
HELPER	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>			
FIREMAN	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>			
TOOL PUSHER	<i>[Signature]</i>	<i>[Signature]</i>	<i>[Signature]</i>			

TOUR 1

TOUR 2

TOUR 3
Gel
Kalan
1/2 Water.

Check Meter
Mud: DESULT

Time	Date	Time
3:00		30
4		30
6		30
8		30
10		30
12 N		30
2		31
4		—
6		36
8		34
10		34
12 N		34

Reactor

Kind

Note bit
Note bit
Note bit
Slide
Slide
Slide
Slide
Slide

SUBC W. EAST PORCUPINE Y.T. -13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	1:45	DRILLING
		1:45	2:00	RIG SERVICE + B.O.P.S
		2:00	8:00	DRILLING
TOUR 2		8:00	8:15	Drilling
		8:15	8:45	Rig Serv. + Blow Out Drill
		8:45	10:30	Drilling
		10:30	11:00	Survey @ 5775 1 3/4
		11:00	1:00	Drilling
TOUR 3		4:00	6:00	Dr. lg.
Gel	2500#	6:00	6:10	Blow Out Rch. (Satty Dept.)
Kalan	250#	6:10	6:30	Rig Service Ch. B.O.P.S
1/2" Water.		6:30	8:30	Dr. lg.
		8:30	9:30	Survey.
		9:30	10:30	Dr. lg.
		11:30	12:30	Core Sample.

CEMENTING TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Check Motor SHUT off, Pipe Roms, Hydrill & Kelly Cock. (Max 23/71)

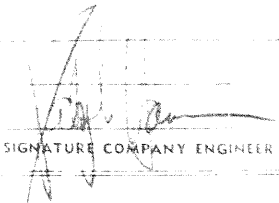
MUD + DESILTER DATA

Time	Depth	Time Over	Flow Line	Under Flow	Over Flow	Visc	AU	PV	YP	Wt Gel	10 Gel	pH	W.L	Ca ⁺⁺	Cl ⁻	Pf	DESILTER Wt/SS	
3:00	0	30	9.5	10.4	9.4	56												38
4		30	9.5	10.4	9.4	56												39
6		30	9.5	10.3	9.4	51						9.0	6.0					35
8		30	9.5	10.2	9.4	53												32
10		30	9.5	10.2	9.4	47												39
12 N		30	9.5	10.2	9.4	48												33
2		31	9.5	10.2	9.4	48												39
4		-	9.5	-	-	43												-
6		34	9.5	10.2	9.4	55												32
8		34	9.5	10.2	9.4	50	29 1/2	18	33	5	14	8.0	5.4	4.0	3.0	0.8		37
10		34	9.5	10.1	9.4	44												32
12 H		34	9.5	10.1	9.4	57												32

ROUNDER 1 STABILIZER DATA

Kind	#	Wt. Trans	Cur. Wt.
NOSE BIT	9049	-	91 1/2
NOSE BIT	9830	-	186 1/4
NOSE BIT	9027	20 3/4	134 3/4
BLADE	458	20 3/4	192
BLADE	451	-	-
CUSHION	9028	20 3/4	329 1/4
10" U.C.	51124	-	194 1/2
30" U.C.	66452	-	194 1/2

BELOW PASSING PROPERTIES IN AVERAGE IN AGGREGATION OF CORE


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *J.P. Lundberg* RIG NO 144

FIELD *WILD CAT* WELL NAME *EAST PORCUPINE 1-130*

SEC TWP Rge W

- DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT *MARCH 22 / 1971*

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO 54	510224 FT	NO 2	510224 FT	NO 55	519611 FT
SINGLE	D.P.	NO. 2	6229 FT	NO 2	6239 FT	NO 1	3181 FT
X-OVER SUB	O.D.		154 FT				154 FT
OTHER	O.D.						
DRILL COLLARS	O.D.	6	49667 FT			14	43506 FT
DRILL COLLARS	O.D.	NO.		NO		NO	
REAMER	O.D.	KIND	515 FT	KIND	515 FT	KIND	515 FT
STABILIZER	O.D.	KIND	463 FT	KIND	462 FT	KIND	462 FT
JARBAR	O.D.	KIND	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB.	O.D.	KIND		KIND		KIND	
BIT OR CORE BARREL							
TOTAL D.P. & TOOLS			567831 FT				568998 FT
KELLY DOWN (BELOW R.B.)			23 FT				2702 FT
DEPTH OF TOOLS			570131 FT				570700 FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	5701 FEET	5701 FEET	5707 FEET
DEPTH START OF TOUR	5688 FEET	5701 FEET	5701 FEET
FOOTAGE DRILLED	13 FEET		6 FEET

	HOURS						HOURS					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	S.P.M.	1300										58
ROTARY SPEED	R.P.M.	60										60
WEIGHT ON BIT	M.lbs.	35										35
MUD WEIGHT	lb/gal	9.5	9.5	9.4								9.5
VISCOSITY	sec/qt	57	56	56								54
W.L./F.C.	c.c./32nd	33										
p.H.		7.8										
MUD LEVEL IN TANKS	Ft.-Ins.											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
16	8 3/4	28061	W + 255R	2-10	44 1/2	545	5701	196	3-8-1
17	8 3/4	341104	M 44	3-10	1	570	5706	6	W

CORE No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT							
					Time	Visc	W.L.F.	p.H.				
TYPE			PREFLOW	mins	I.H.P.	ps	F.P.P.	ps	Time	4M	P.V.	AK
FROM			ISI	mins	F.H.P.	ps	F.F.P.	ps	Mud Wt	10 Min	Ge	
TO			VO	mins	ISIP	ps	G.T.S.	ps	Visc			
Recovery			FSI	mins	FSIP	ps	F.T.S.	ps	A.V.			
HOURS			RECOVERY						P.V.			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<i>P. M. J. Sick</i>	<i>FRASER</i>	<i>G. Sadargren</i>			
DERRICKMAN	<i>W. M. Collins</i>	<i>FRASER</i>	<i>J. Pedersen</i>			
HELPER	<i>W. M. Collins</i>	<i>VALQUISTE</i>	<i>R. Ragero</i>			
HELPER	<i>W. M. Collins</i>	<i>KINE</i>	<i>L. Mychotak</i>			
HELPER	<i>W. M. Collins</i>	<i>COX</i>	<i>L. Charnipiski</i>			
FIREMAN						
TOOL PUSHER						

2080
MUD and CHEM
Kind
TOUR 1
TOUR 2
TOUR 3
Lazy 1/2 water
MUD +
Time DEPTH
12:00H 5688 120
2:00 120
4:00 120
7:00 65
12:00H 65
KIND
MUD WT
Visc
p.H.
SAND
CA. ppm
CL. ppm
LAUE
LAME
W. M. COLLINS
W. M. COLLINS
W. M. COLLINS
W. M. COLLINS
W. M. COLLINS
W. M. COLLINS
W. M. COLLINS

LOG W/ LAST RECORDING V.T. 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
97		12:00	2:30	Drilling
UR	TOUR 1	2:30	2:45	BAR DRILL WITH CREW
1 FT		2:45	5:45	DRILLING
1 FT		5:45	6:15	CLEAN OUT MUD LINES THROUGH OUT HOLE
4 FT		6:15	6:30	RIG SERVICE REPS TAKE RIG OFF
FT		6:30	8:00	HOISTING
6 FT				
5 FT	TOUR 2	8:00	10:30	HOIST BIT # 14
2 FT		10:30	12:00	SHUT DOWN ENGINES & LIGHT PLANTS
9 FT				TO ALLOW SEISMIC PARTY TO SHOOT LINE
FT				THRU LEASE
FT		12:00	12:15	RIG SER, BLIND RAME, PIP RAME, H, DRILL
8 FT		12:15		SIGMA DC, STAB, PIRAM, SUBS LAY
1 FT			1:00	V/L POWER
0 FT	TOUR 3	4:00	7:45	SCOPE O/C & LAY DOWN SAME
	Lazy's water	7:45	8:00	RIG SERVICE
FEET		8:00	10:00	RUN IN HOLE W/ BIT # 17
FEET		10:00	11:00	CLEAN 45' TO BOTTOM
FEET		11:00	12:00	D-Log

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD - QUALITY DATA

TIME	DEPTH	T. GEL	FLU. LINE	UNMOIST. OVERHEAD	PH	AV	PV	YP	10% GEL	10% 10" GEL	W.L.	Ca ⁺⁺	C-	174
12:00H	5688	120	9.5	10.1	9.5	57	9.0				S.B			
2:00		120	9.5	9.5	9.6	56								
4:00		120	9.6	10.1	9.5	56								
TRIP														
11:00H		65	9.5	11.4	9.4	55								
12:00H		65	9.5	11.4	9.4	54								

ROAMER + STABILIZER DATA

KIND	#	1/2S TOURS	W/L. HRS
WHEEL BIT	9049	—	9 1/2
WHEEL BIT	9830	—	18 1/4
WHEEL BIT	9027	6 1/2	114 95
CLAVE	458	1	17 1/4 17 1/4
SCREW	451	5 1/2	227 1/4 206 1/4
WHEEL	9028	6 1/2	308 1/2 287 1/2
W.C.	51124	—	194 1/2
W.C.	66454	—	194 1/2

Laid down 6 wheel cables for incipient wash outs.

Washing now get bottom cutters in Roamer # 9027 @ 92 loads

Power bit 2 - locked + spinning.

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD *WILD CAT*

WELL NAME *FAST - PORCUPINE 113*

CONTRACTOR *G.P. DRILLING* RIG NO *14*

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

MARCH 21 1971

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR									
STANDS	D.P.	NO. <i>53</i>	<i>5</i>	<i>0</i>	<i>9</i>	<i>9</i>	FT	NO. <i>21</i>	<i>5</i>	<i>1</i>	<i>0</i>	FT	NO. <i>54</i>	<i>5</i>	<i>1</i>	<i>0</i>	FT
SINGLE	D.P.	NO. <i>1</i>			<i>3</i>	<i>0</i>	FT					FT	NO. <i>1</i>			<i>3</i>	FT
X-OVER SUB	O.D.				<i>1</i>	<i>5</i>	FT				<i>1</i>	FT				<i>1</i>	FT
OTHER	O.D.						FT					FT					FT
DRILL COLLARS	O.D.	<i>7</i>	<i>16</i>		<i>4</i>	<i>9</i>	FT		<i>4</i>	<i>9</i>	<i>6</i>	FT	<i>16</i>	<i>4</i>	<i>9</i>	<i>6</i>	FT
DRILL COLLARS	O.D.	NO.					FT	NO.				FT	NO.				FT
REAMER	O.D.	<i>9027</i>	<i>NEARBY</i>		<i>5</i>	<i>1</i>	FT	<i>KIND</i>	<i>5</i>	<i>1</i>	<i>5</i>	FT	<i>KIND</i>	<i>5</i>	<i>1</i>	<i>5</i>	FT
STABILIZER	O.D.	<i>451</i>	<i>BLIND</i>		<i>4</i>	<i>6</i>	FT	<i>KIND</i>	<i>4</i>	<i>6</i>	<i>3</i>	FT	<i>KIND</i>	<i>4</i>	<i>6</i>	<i>3</i>	FT
JARS	O.D.	<i>9028</i>	<i>CUSHION</i>		<i>5</i>	<i>6</i>	FT	<i>KIND</i>	<i>5</i>	<i>6</i>	<i>9</i>	FT	<i>KIND</i>	<i>5</i>	<i>6</i>	<i>9</i>	FT
BUMPER SUB							FT					FT					FT
BIT OR CORE BARREL							FT					FT					FT
TOTAL D.P. & TOOLS					<i>5</i>	<i>5</i>	FT		<i>5</i>	<i>6</i>	<i>1</i>	FT		<i>5</i>	<i>6</i>	<i>4</i>	FT
KELLY DOWN (BELOW R.B.)					<i>3</i>	<i>8</i>	FT		<i>1</i>	<i>6</i>	<i>0</i>	FT		<i>4</i>	<i>1</i>	<i>7</i>	FT
DEPTH OF TOOLS					<i>5</i>	<i>5</i>	FT		<i>5</i>	<i>6</i>	<i>3</i>	FT		<i>5</i>	<i>6</i>	<i>8</i>	FT
TOUR																	
DEPTH END OF TOUR					<i>5</i>	<i>5</i>	FEET		<i>5</i>	<i>6</i>	<i>3</i>	FEET		<i>5</i>	<i>6</i>	<i>8</i>	FEET
DEPTH START OF TOUR					<i>5</i>	<i>5</i>	FEET		<i>5</i>	<i>5</i>	<i>9</i>	FEET		<i>5</i>	<i>6</i>	<i>3</i>	FEET
FOOTAGE DRILLED					<i>5</i>	<i>1</i>	FEET		<i>4</i>	<i>0</i>		FEET		<i>5</i>	<i>7</i>		FEET

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:30 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.	
PUMP	<i>52</i>	<i>1300</i>	<i>1300</i>	<i>52</i>	<i>1300</i>	<i>1300</i>	<i>52</i>	<i>1300</i>	<i>52</i>	<i>1350</i>	<i>1350</i>	<i>52</i>	<i>1350</i>
ROTARY SPEED	<i>53</i>	<i>53</i>	<i>53</i>	<i>53</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>65</i>	<i>65</i>	<i>65</i>	<i>65</i>	<i>65</i>
WEIGHT ON BIT	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>
MUD WEIGHT	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>
VISCOSITY	<i>51</i>	<i>50</i>	<i>50</i>	<i>48</i>	<i>49</i>	<i>22</i>	<i>54</i>	<i>55</i>	<i>56</i>	<i>57</i>	<i>57</i>	<i>56</i>	<i>56</i>
W.L./F.C.	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>6.5</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>
p.H.							<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>	<i>9.0</i>
MUD LEVEL IN TANKS												<i>34"</i>	<i>34"</i>

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT/HR	BIT CONDITION	
<i>16</i>	<i>8 3/4</i>	<i>28067</i>	<i>W.H. x 55R</i>	<i>2-10</i>	<i>39</i>	<i>543</i>	<i>5633</i>	<i>283</i>	<i>7.3</i>	<i>W</i>

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.P.P.	p.s.i.	I.F.P.	p.s.i.	Time <i>8:02</i>	AM <i>0.0</i>
FROM		I.S.I.	mins	F.H.P.	p.s.i.	F.F.P.	p.s.i.	Mud Wt <i>9.6</i>	Int. Gel <i>7/16</i>
TO		V.O.	mins	I.S.P.	p.s.i.	G.T.S.	p.s.i.	Visc <i>51</i>	W.F.C. <i>6.6</i>
Recovery		F.S.I.	mins	F.S.P.	p.s.i.	F.T.S.	p.s.i.	AV <i>28.5</i>	p.H. <i>9.5</i>
HOURS		RECOVERY						P.V. <i>17</i>	Spnd <i>7</i>

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Y.P.	DEVIATION RECORD
DRILLER	<i>P. M. K. ...</i>	<i>FRASER</i>	<i>G. Sodergran</i>	<i>17</i>	Kind <i>Welding</i>
DERRICKMAN	<i>J. ...</i>	<i>FRASER</i>	<i>J. Pedersen</i>	<i>17</i>	Depth <i>5502</i>
HELPER	<i>W. M. ...</i>	<i>V. L. ...</i>	<i>R. Rogers</i>	<i>17</i>	Reading <i>1 1/8</i>
HELPER	<i>J. ...</i>	<i>R. ...</i>	<i>L. Nyckolats</i>	<i>17</i>	<i>1 1/2</i>
HELPER	<i>Robert ...</i>	<i>GOX</i>	<i>L. Chernyestk.</i>	<i>17</i>	<i>10/100</i>
FIREMAN					
TOOL PUSHER					

SOBC
MUD and CHEMICAL Kind
TOUR 1 *6 1/2" 500'*
TOUR 2 *6 1/2" 600'*
K&K ZONE 120'
DOMICILE #10
TOUR 3 *Caustic*
Lazy 1/2" Water
Desiter
Reamer
Line
New bit
New bit
New bit
same
same
same
10/100
30 D.C.

SOBC W4 EAST PORCUPINE V.T. 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971		12:00	3:15	DRILLING
UR	TOUR 1	3:15	3:45	WORK PIPES + SURVEY
4 FT.	GEL # 500 ^{lb}	3:45	4:00	RIG SERVICE + BOP
0 FT.		4:00	8:00	DRILLING
4 FT.				
7 FT.				
5 FT.	TOUR 2	8:00	8:30	DRILLING
3 FT.	GEL # 600	8:30	9:00	RIG SER. & CHECK BOP, Kelly Cock.
9 FT.	KEL ZON # 150	9:00	2:30	DRILLING
FT.	DOWICIDE # 10	2:30	3:00	SURVEY @ 5615 1 1/2
FT.		3:00	4:00	DRILLING
2 FT.				
4 FT.				
6 FT.	TOUR 3	4:00	6:30	Drilg.
FEET	Caustic 50*	6:30	6:45	Rig Service.
FEET	Lazy 1/2" Water.	6:45	7:00	Drilg.
FEET		7:00	7:15	Blow Out Drill.
HOURS		7:15	11:15	Drilg.
12:00 P.M.		11:15	12:00	Run Survey.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

5 1/2
12:50
6 1/2
3 1/2
9 1/2
5 1/2
5 1/2
2 1/2
3 1/2

Desinter 2nd 24 hrs : 17000 mixed

Average Inflow : 10.1 @ 2 gal/min
Overflow : 9.5

Reamer + Single 17000

Kind	#	Has Tool	Wt. LBS
New bit	9049	—	91 1/2
New bit	9830	—	18 1/2
New bit	9027	21	107 1/2
Bit	453	—	170 1/2
Bit	451	21	221 3/4
Cushion	9028	21	302
10" D.C.	51124	—	194 1/2
30" D.C.	66452	—	194 1/2

Readings

1/2
3/4
1 1/2

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO **114**

FIELD **WLD CAT** WELL NAME **EAST EPORLYPINE 1-13** SEC

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 20 1971**

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR				
STANDS	D.P.	NO. 51	4982	163	FT	NO. 49	1547	FT	NO. 53	5009	96	FT
SINGLE	D.P.	NO. 2		6196	FT	NO.	2167	FT	NO.			FT
X-OVER SUB	O.D.			154	FT		154	FT			154	FT
OTHER	O.D.			49667	FT		49667	FT				FT
DRILL COLLARS	O.D.	7	16	515	FT		515	FT	16	49667		FT
DRILL COLLARS	O.D.	NO.		463	FT	NO.	463	FT	NO.	515		FT
REAMER	O.D.	49027	KIND REAR BIT	569	FT	KIND	569	FT	KIND REAR BIT	463		FT
STABILIZER	O.D.	451	KIND BLADE		FT	KIND		FT	KIND BLADE	569		FT
JARS	O.D.	9028	KIND CUSHION		FT	KIND		FT	KIND CUSHION			FT
BUMPER SUB					FT			FT				FT
BIT OR CORE BARREL					FT			FT				FT
TOTAL D.P. & TOOLS				539732	FT		546051	FT		552364		FT
KELLY DOWN (BELOW R.B.)				23	FT		2108	FT		1636		FT
DEPTH OF TOOLS				542032	FT		548156	FT		544000		FT
TOUR		MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR				
DEPTH END OF TOUR		5420 FEET			5481 FEET			5540 FEET				
DEPTH START OF TOUR		5405 FEET			5420 FEET			5481 FEET				
FOOTAGE DRILLED		15 FEET			61 FEET			59 FEET				

DAY WORK	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP			52	52	52	52	52	52	52	52	52	52
ROTARY SPEED			50	50	50	50	50	50	50	50	60	60
WEIGHT ON BIT			25	25	25	35	35	35	35	30	30	30
MUD WEIGHT			9.5	9.4	9.5	9.5	9.4	9.4	9.5	9.5	9.5	9.5
VISCOSITY			51	53	54	54	54	54	56	55	54	54
W.L./F.C.			6.2	7.0	7.0	7.0	7.0	7.0	6.2	6.2	6.2	6.2
p.H.			9.0	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT HR	BIT CONDITION
16	8 3/4	28067	W.H. X55R	7-10	18	5405	5540	135	7 1/2

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT
TYPE		PREFLOW	mins	IHP	ps
FROM		ISI	mins	FHP	ps
TO		VO	mins	ISIP	ps
Recovery		FSI	mins	FSIP	ps
HOURS		RECOVERY			ps

SIGNATURES	MORNING TOUR	DA LIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>P. McK...</i>	<i>F. Soder...</i>	<i>G. Soder...</i>
DERRICKMAN	<i>J. J. ...</i>	<i>F. Soder...</i>	<i>J. Pedersen</i>
HELPER	<i>D. M. Collins</i>	<i>V. ...</i>	<i>R. Rogers</i>
HELPER	<i>R. ...</i>	<i>R. ...</i>	<i>L. Nycholat</i>
HELPER		<i>COX</i>	<i>L. Chernipeskii</i>
FIREMAN			
TOOL PUSHER	<i>T. ...</i>		

DEVIATION RECORD		
Kind	Depth	Reading
W.L.	5492	+ 7/8

MUD and CHEMICAL		
Kind	TOUR 1	TOUR 2
	50th KILZAN	Gal # 300
	100th PEL	KILZAN # 10
	50th CAUSTIC	CAUSTIC # 2
		3" Water
TOUR 3		
	Caustic	
	3" Water	
TIME	Depth	Desire TIME
6:00 AM		60
8:00	5420	60
10		35
12		40
2		40
4	5481	40
6		41
8	5500	39
9		40
10		40
11		40
	Reamer	
	Kind	
	NEAR BIT	70
	NEAR BIT	98
	NEAR BIT	902
	BLADE	45
	BLADE	45
	CUSHION	902
	10" O.C.	511
	30" O.C.	164

SOBC WHEAST PORCUPINE V.T. 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971				
OUR				
TOUR 1				
96 FT	50# KILZAN	12:00	12:15	RIG SERVICE + B.C.P.'s
FT	100# FEL	12:15	1:30	PULL DRILL LINE OF DRUM TO MULL LINE ON DRUM
54 FT	50# CAUSTIC	1:30	3:30	RUN IN SHOW
FT		3:30	5:00	CLEAN 60" TO BTM.
FT		5:00	8:00	DRILLING
67 FT				
15 FT				
13 FT	TOUR 2			
FT	Gel # 300	8:00	9:45	Drilling
FT	KILZAN # 100	9:45	10:00	Rig Serv + Check B.O.P's
FT	CAUSTIC # 50	10:00	11:00	Drilling
FT	3" Water			
64 FT				
96 FT				
00 FT	TOUR 3			
R	Caustic 50#	4:22	6:15	Drilling
FEET	3" Water	6:15	6:45	Survey
FEET		6:45	7:22	Rig Service Greasing Rig. B.O.P.'s
FEET		7:22	12:00	Drilling
HOURS				
12:00 P.M.				

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

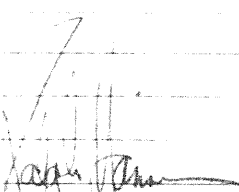
MUD + DESILTER DATA

TIME	DEPTH	TIME 3 GA	FLOWLINE	UNDERFLOW	OVERFLOW	VISC	AU	PV	YP	INIT Gel	10 MIN Gel	W.L.	pH	Ca ⁺⁺	Cl ⁻	Pf	RA
6:00 AM		60	9.5	10.3	9.4	51											
8:00	5400	60	9.4	10.3	9.4	53											
10		35	9.4	10.1	9.5	54	27	17	20	8	13	7.4	9.2	40	150	0.15	3.4 @ 77
12		40	9.4	10.1	9.5	54											
2		40	9.4	10.2	9.5	57											
4	5481	40	9.4	10.0	9.5	57											
6		41	9.4	10.0	9.5	56											
8	5508	39	9.4	10.1	9.5	55	31	13	26	9	15	7.0	9.4	TR	200	0.15	
9		40	9.4	10.1	9.5	55											
10		40	9.4	10.0	9.5	54											
11		40	9.4	10.0	9.5	54											

REMARK + STABILIZER DATA

KIND	#	Has TOSS	Wt. HPS
NEAR BT	9049	—	91 1/2
NEAR BT	9830	—	186 1/4
NEAR BT	9027	18	86 1/2
BLADE	458	—	170 1/4
BLADE	451	18	200 3/4
CUSHION	9028	18	281
10' O.C.	51124	—	194 1/2
30' O.C.	16452	—	194 1/2

Cleaned up engine area for support
Second FOCK ENGINE OPERATIONAL AT 7:00 PM


 SIGNATURE COMPANY ENGINEER

SORC WM EAST PORCUPINE YT I-13

1971
 HOUR
 FT
 FT
 FT
 FT
 FT
 FT
 FT
 FT
 FT
 FEET
 FEET
 FEET
 HOURS
 12:30 PM

MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	2:45	DRILLING
		2:45	3:00	RIG SERVICE - 13 CTS
		3:00	6:45	DRILLING
		6:45	7:15	WORK PIPE + SURVEY 5337 / 5337 1 3/4
		7:15	8:00	DRILLING
TOUR 2		8:00	11:15	Drilling
	Gel # 300	11:15	11:30	RIG SERVICE W/ Check R.C.P.S
	KALZAN # 100	11:30	3:00	DRILLING
	POVICIDE # 10	3:00	3:15	SURVEY @ 5405'
		3:15	11:00	Blow Kelly & Lost BIT # 15
TOUR 3		4:00	7:20	Hoisting Bit # 15 - Strap Out.
		7:20		Break Bit off Caliper Some.
				Caliper Reamers + Stub. Change
				Rubber On Cushion Stub. Reverse
		9:00		Ends On Near Bit Reamers Roller Pins.
		9:00	10:00	Run In Collars & New Bit. Ch. Drg. Line
		10:00	11:00	Cont. & Slip 580' Drg. Line.
		11:00	12:00	Run In Bit # 16

CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DESILTER DATA

TIME	DEPTH	TIME 1 GAL	FLOW LINE	UNDER FLOW	OVER FLOW	VISC	W.L.	PRESS.
12:00 M	5295	30	9.5	10.3	9.1	S2	6.2	45
2		30	9.5	10.3	9.1	S4		45
4		30	9.5	10.3	9.1	S4	6.2	45
6		60	9.5	10.5	9.2	S2		45
8	5353	105	9.5	10.5	9.5	S2	7.0	40
10		40	9.5	10.2	9.4	S6		35
12	5334	35	9.5	10.1	9.4	S5		38
2:00 PM	5400	30	9.5	10.1	9.5	S2		40

REAMER + STABILIZER DATA

KIND	No.	HAS TODAY	COMP. HRS
NEW BIT	9049	-	91 1/2
NEAR BIT	9830	-	186 1/4
NEAR BIT	9027	14	68 1/2
BLADE	458	-	170 1/4
BLADE	451	14	182 3/4
CUSHION	9028	14	263
10 D.C.	51124	-	194 1/2
30 D.C.	66452	-	194 1/2

TRIP OUT VERY GOOD

#1 FLOOD MOTOR STILL DOWN

MEASURE:

	Coups + etc.	PINE # 207	TOTAL
ROCKS	513.68	4855.63	5369.36
SUM	514.21	4852.42	5366.63

CONNECTION MADE TO PIPE ONLY

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. DRINKING* RIG NO *14*

FIELD *WIND CAT* WELL NAME *E. PORCUPINE 1563*

SEC TWP Rge W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

MARCH 18 1971

MUD and CHEMICAL

Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	D.P.	NO. <i>48</i>	<i>454164</i>	FT.	NO. <i>50</i>	<i>473052</i>	FT.	NO. <i>50</i>	<i>473052</i>	FT.
SINGLE	D.P.	NO. <i>2</i>	<i>6330</i>	FT.	NO. <i>1</i>	<i>3080</i>	FT.	NO. <i>1</i>	<i>3080</i>	FT.
X-OVER SUB	O.D.		<i>154</i>	FT.		<i>154</i>	FT.		<i>154</i>	FT.
OTHER	O.D.			FT.			FT.			FT.
DRILL COLLARS	O.D.	<i>16</i>	<i>49667</i>	FT.	<i>15</i>	<i>49667</i>	FT.	<i>15</i>	<i>49667</i>	FT.
DRILL COLLARS	O.D.	NO.		FT.	NO.		FT.	NO.		FT.
REAMER	O.D.	KIND <i>9027</i>	<i>515</i>	FT.	KIND <i>9027</i>	<i>515</i>	FT.	KIND <i>9027</i>	<i>515</i>	FT.
STABILIZER	O.D.	KIND <i>GRANT</i>	<i>463</i>	FT.	KIND <i>GRANT</i>	<i>463</i>	FT.	KIND <i>GRANT</i>	<i>463</i>	FT.
STABILIZER	O.D.	KIND <i>GRANT</i>	<i>569</i>	FT.	KIND <i>GRANT</i>	<i>569</i>	FT.	KIND <i>GRANT</i>	<i>569</i>	FT.
BUMPER SUB.				FT.			FT.			FT.
BIT OR CORE BARREL				FT.			FT.			FT.
TOTAL D.P. & TOOLS			<i>518862</i>	FT.	<i>521270</i>		FT.	<i>527500</i>		FT.
KELLY DOWN (BELOW R.B.)			<i>308</i>	FT.	<i>2000</i>		FT.	<i>2000</i>		FT.
DEPTH OF TOOLS			<i>514862</i>	FT.	<i>523270</i>		FT.	<i>529500</i>		FT.

TOUR 1
GEL 400
KELZAN 1500

TOUR 2
GEL # 500
KELZAN # 15
CAUSTIC # 50
WATER 1/2 ST.
RANICIDE # 10

TOUR 3
Caustic

DAY WORK	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	HOURS	
DEPTH END OF TOUR	<i>5148</i>				<i>5232</i>				<i>5295</i>			
DEPTH START OF TOUR	<i>5086</i>				<i>5148</i>				<i>5232</i>			
FOOTAGE DRILLED	<i>62</i>				<i>84</i>				<i>63</i>			

PUMP	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
S.P.M.	<i>52</i>			<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>
P.S.I.	<i>1300</i>			<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>	<i>1300</i>
ROTARY SPEED	<i>50</i>			<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT				<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>25</i>	<i>25</i>
MUD WEIGHT	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>
VISCOSITY	<i>57</i>	<i>56</i>	<i>54</i>	<i>54</i>	<i>49</i>	<i>50</i>	<i>55</i>	<i>56</i>	<i>54</i>	<i>55</i>	<i>55</i>	<i>55</i>
W.L.F.C.	<i>67</i>							<i>70</i>	<i>70</i>		<i>60</i>	<i>60</i>
pH	<i>8.5</i>		<i>15</i>									<i>9.0</i>
MUD LEVEL IN TANKS							<i>8.5</i>					<i>39"</i>

Driller: 2
11

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT. HR.	BIT CONDITION
<i>15</i>	<i>8 3/4</i>	<i>34288</i>	<i>SEC 588</i>	<i>2-10</i>	<i>54 1/2</i>	<i>4739</i>	<i>5295</i>	<i>556</i>	<i>10.2</i>

Kind #
NEAR BIT 90

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
	DRILLER	DERRICKMAN	HELPER	DRILLER	DERRICKMAN	HELPER	DRILLER	DERRICKMAN	HELPER
	<i>P.M. King</i>	<i>Jim Bailey</i>	<i>James M. King</i>	<i>F.H. Scott</i>	<i>F.H. Scott</i>	<i>V. L. O'Neil</i>	<i>G.H. Sadegran</i>	<i>J. Pedersen</i>	<i>R. Rogers</i>
		<i>D.M. Collins</i>	<i>Albert Allen</i>			<i>Ken</i>		<i>L. Nykolak</i>	<i>L. Chernipiski</i>

NEAR BIT 98
NEAR BIT 90
BLANK 45
BLANK 45
CUSHION 70
10 D.C. 51
30 D.C. 66

DEVIATION RECORD		
Kind	Depth	Reading
<i>WINDING</i>	<i>4960</i>	<i>3/4</i>
<i>WINDING</i>	<i>5117</i>	<i>1 1/4</i>
<i>LINE</i>	<i>5212</i>	<i>1 1/2</i>
<i>LINE</i>	<i>5225</i>	<i>1 3/4</i>

MLU DATA
TIME DEPTH
Bio # 5150
Bio # 5270

SORC E. PORCUPINE Y.T. 13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
1971	Kind	Amount		
TOUR	TOUR 1			DRILLING
5.2 FT	GEL 400	12.00	3.00	REPAIR OIL PUMP IN COMPOUND
8.0 FT	KELZAN 150	3.00	4.15	DRILLING
5.4 FT		4.15	5.30	WORK PIPE + SURVEY AT 5117 / 1 1/2
		5.30	6.00	RIG SERVICE + B.O.P.
		6.00	6.15	DRILLING
		6.15	8.00	
1.5 FT	TOUR 2			DRILLING
6.2 FT	GEL # 500	8.00	8.45	RIG SERVICE + B.O.P.
6.9 FT	KELZAN # 150	8.45	9.00	DRILLING
	CAUSTIC # 50	9.00	2.30	SURVEY @ 5212 1 1/2
	WATER 1/2 ST.	2.30	3.00	DRILLING
	Dawicide # 10	3.00	11.00	
0.0 FT				
0.0 FT				
0.0 FT				
UR	TOUR 3			Dr. lg.
FEET	Caustic 50	4.00	5.45	Rig Service Ch. B.O.P.
FEET		5.45	6.15	Dr. lg.
FEET		6.15	9.15	Con. & Survey - 5275 - 1 3/4
		9.15	10.20	Dr. lg.
		10.20	12.00	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

Disinter: 2⁰⁰ am Underflow @ 1 gal/sec Overflow 9.4
 11⁰⁰ pm " 10.2 @ 1 gal / 32 sec " 9.1

#1 FLOOR MOTOR DOWN WAITING ON REPAIRS

REMEMBER + STABILIZER DATA

KIND	#	Hrs	TOUR	WH. HOURS
NEAR BIT	9049			9 1/2
NEAR BIT	9830			18 1/4
NEAR BIT	9027	19 1/2		54 1/2
BLANK	453			170 1/4
BLANK	451	19 1/2		163 3/4
CUSHION	9028	19 1/2		249
10" D.C.	51124			194 1/2
30" D.C.	66452			194 1/2

TIME	DEPTH	WT	VISC.	WL	pH	AV	PV	YP	INIT GEL	10 MIN GEL	CP	G-PP
1 1/2	5150	9.4	54	6.9	9.0	29	16	24	7	18	0	200 0.1
1 3/4	5270	9.4	55	7.2	8.5	31 1/2	19	25	13	18	30	100 0.05

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling*

RIG NO. *14*

FIELD *WIND CAT*

WELL NAME *E PORCUPINE LSD 13*

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

MARCH 17 1971

SOBC
MUD and CHEMICAL
Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR				
STANDS	D.P. NO. <i>46</i>	<i>435196</i>	FT.	NO. <i>47</i>	<i>444717</i>	FT.	NO. <i>48</i>	<i>454164</i>	FT.	
SINGLE	D.P. NO. <i>2</i>	<i>6356</i>	FT.	NO.		FT.	NO.		FT.	
X-OVER SUB	O.D.	<i>154</i>	FT.	<i>154</i>	FT.	<i>154</i>	FT.	<i>154</i>	FT.	
OTHER	O.D.		FT.		FT.		FT.		FT.	
DRILL COLLARS	O.D. <i>7</i>	<i>16</i>	<i>49667</i>	FT.	<i>16</i>	<i>49667</i>	FT.	<i>16</i>	<i>49667</i>	FT.
DRILL COLLARS	O.D. <i>4</i>			FT.			FT.			FT.
REAMER	O.D. <i>9027</i>		<i>515</i>	FT.		<i>515</i>	FT.		<i>515</i>	FT.
STABILIZER	O.D. <i>5490</i>		<i>463</i>	FT.		<i>463</i>	FT.		<i>463</i>	FT.
JARAB	O.D. <i>9028</i>		<i>569</i>	FT.		<i>569</i>	FT.		<i>569</i>	FT.
BUMPER SUB.				FT.			FT.			FT.
BIT OR CORE BARREL				FT.			FT.			FT.
TOTAL D.P. & TOOLS		<i>492920</i>	FT.	<i>496085</i>	FT.	<i>505532</i>	FT.			FT.
KELLY DOWN (BELOW R.B.)		<i>16</i>	FT.	<i>4205</i>	FT.	<i>3068</i>	FT.			FT.
DEPTH OF TOOLS		<i>494420</i>	FT.	<i>500290</i>	FT.	<i>508600</i>	FT.			FT.

TOUR 1
40' KELLY
500' R.L.
10' CONCRETE
50' CUSHION

TOUR 2

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>4944</i> FEET	<i>5000</i> FEET	<i>5086</i> FEET
DEPTH START OF TOUR	<i>4884</i> FEET	<i>4944</i> FEET	<i>5000</i> FEET
FOOTAGE DRILLED	<i>60</i> FEET	<i>56</i> FEET	<i>86</i> FEET

	HOURS				HOURS				HOURS			
	2.00 A.M.	4.00 A.M.	6.00 A.M.	8.00 A.M.	10.00 A.M.	12.00 A.M.	2.00 P.M.	4.00 P.M.	6.00 P.M.	8.00 P.M.	10.00 P.M.	12.00 P.M.
PUMP	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>	<i>52</i>
ROTARY SPEED	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>
MUD WEIGHT	<i>95</i>	<i>95</i>	<i>9.4</i>	<i>9.5</i>	<i>9.4</i>	<i>9.4</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>
VISCOSITY	<i>50</i>	<i>62</i>	<i>62</i>	<i>63</i>	<i>63</i>	<i>64</i>	<i>63</i>	<i>58</i>	<i>56</i>			
W.L./F.C.	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>	<i>7.2</i>			
p.H.							<i>8.5</i>	<i>8.2</i>			<i>8.2</i>	
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT. HR.	BIT CONDITION
<i>14</i>	<i>5 7/8</i>	<i>342988</i>	<i>SEC SR8</i>	<i>8-10</i>	<i>35</i>	<i>4739</i>	<i>5086</i>	<i>347</i>		<i>ia</i>

CORE No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	I.H.P.	p.s.i.	I.F.P.	p.s.i.	Time	AM PM	Alk
FROM		I.S.I.	mins	F.H.P.	p.s.i.	F.F.P.	p.s.i.	Mud Wt		Int. Gel 10 Min. Gel
TO		V.O.	mins	I.S.I.P.	p.s.i.	G.T.S.	p.s.i.	Visc		W.L.F.C.
Recovery		F.S.I.	mins	F.S.I.P.	p.s.i.	F.T.S.	p.s.i.	A.V.		p.H.
HOURS		RECOVERY						P.V.		Solid %

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<i>F.M. KITTENICK</i>	<i>FRASER</i>	<i>C.H. Selbergren</i>			
DERRICKMAN	<i>Jim Paulie</i>	<i>FRASER</i>	<i>J. Pederson</i>	<i>Vertical</i>	<i>4834</i>	<i>3/4</i>
HELPER	<i>James H. DeLoach</i>	<i>VALIQUETTE</i>	<i>R. Rogers</i>		<i>4960</i>	<i>3/4</i>
HELPER	<i>D.M. Collins</i>	<i>RINE</i>	<i>L. Mychotab</i>			
HELPER	<i>Albert Olex</i>	<i>COX</i>	<i>Mr. Cherny</i>			
FIREMAN						
TOOL PUSHER						

#1 Flow

#1 pump

Derrick under

Reamers

Near bit

Blade

Cushion

10' D.C.

10' D.C.

SOBC E PARCUPIING Y T 13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE	
971	Kind	Amount			
0 FT	TOUR 1		12:00	12:45	DRILLING
4 FT	400g. KELZAN		12:45	1:00	WORK ON #2 PUMP
FT	500# BRL		1:00	2:30	DRILLING
4 FT	12" DOWNPIPE		2:30	2:45	RIG SERVICE + BOPS
FT	50" AUSTIC		2:45	3:00	WORK PIPE HOLE TIGHT
7 FT			3:00	4:00	DRILLING
FT			4:00	4:45	WORK ON PUMP
5 FT	TOUR 2		4:45	8:00	DRILLING
3 FT			8:00	9:00	DRILLING
1 FT			9:00	9:30	RIG SER. & BOPS
FT			9:30	11:00	PUT NEW CHAIN ON #1 PUMP
FT			11:00	12:15	DRILLING
FT			12:15	12:45	SURVEY @ 4960 3/4
2 FT			12:45	1:00	DRILLING
8 FT					5
0 FT	TOUR 3		4:00	4:00	Rig Service + Ch. B.O.P.
FEET			4:00	6:00	Drig.
FEET			6:00	6:45	Jack out Hyd.
FEET			6:45	12:00	Drig.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

- NOT on stream - using T₂ mix mud

#1 Floor motor down waiting on repairs

#1 pump back in operation

Densiter back on operation 10:20 AM
Underflow 10.2 @ 28 sec/gal Overflow 9.4

Reamers & Stabilizers

Near bit # 9049	-	9 1/2 cumulative hrs
" " # 9830	-	186 1/4 " " "
" " # 9027	20 hrs	35 " " "
Blade # 458	-	170 1/4 " " "
" " 451	20 hrs	149 1/4 " " "
Cushion # 9028	20 hrs	229 1/2 " " "
10" D.C.	51124	194 1/2 " " "
10" D.C.	66452	194 1/2 " " "

L.F. Gammally
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. Drilling** RIG NO **14**

FIELD **WILD CAT** WELL NAME **15 PORCUPINE SD-13**

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

DATE **MARCH 16 1978**

SORC

MUD and CHEMICAL

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS .. D.P.	NO. 44 416172 FT	NO. 45 425701 FT	NO. 46 435196 FT
SINGLE .. D.P.	NO. 2 6333 FT	NO. 1 3172 FT	NO. 124 FT
X-OVER SUB .. O.D.	154 FT	154 FT	124 FT
OTHER .. O.D.	FT	FT	FT
DRILL COLLARS "7" O.D.	16 49667 FT	49667 FT	49667 FT
DRILL COLLARS .. O.D.	NO. FT	NO. FT	NO. FT
REAMER -9021 O.D.	KIND 515 FT	KIND 515 FT	KIND 515 FT
STABILIZER -990 O.D.	KIND 463 FT	KIND 463 FT	KIND 463 FT
JARS 9018 O.D.	KIND 569 FT	KIND 569 FT	KIND 569 FT
BUMPER SUB.	FT	FT	FT
BIT OR CORE BARREL	FT	FT	FT
TOTAL D.P. & TOOLS	473813 FT	480241 FT	486264 FT
KELLY DOWN (BELOW R.B.)	19 FT	2300 FT	1900 FT
DEPTH OF TOOLS	475772 FT	482541 FT	488464 FT
TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	4757 FEET	4825 FEET	4884 FEET
DEPTH START OF TOUR	4739 FEET	4757 FEET	4825 FEET
FOOTAGE DRILLED	18 FEET	68 FEET	59 FEET

TOUR 1

TOUR 2

TOUR 3

GEL 500
KELZAN 150
DOWCIDE 10

GEL # 700
KELZAN # 150
WATER 7"

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.			52 (1200)		52 1150	52 1150	52 1200	52 1200	52 1200	52 1200	52 1200	52 1200
ROTTARY SPEED R.P.M.					50	50	50	50	50	50	50	50
WEIGHT ON BIT M lbs.					32	32	32	32	32	32	32	32
MUD WEIGHT lb/gal			9.5		9.6	9.6	9.6	9.6	9.5	9.6	9.4	9.5
VISCOSITY sec/qt			60		55	54	55	55	53	54	52	53
W.L./F.C. c.c./32nd			68 72		68	-	-	-	-	-	66	-
p.H.			9.0		9.0	-	-	-	-	-	8.0	-
MUD LEVEL IN TANKS Ft.-Ins.												

Bridge

#1 pump

Will re

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT. HR.	BIT CONDITION
14	8 3/4	342788	SEC 588	3-10						

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT						
					Time	7	A.M.	Air	0.3		
					Mud Wt	9.5		Int. Gel	9		
					Visc	60		10 Min. Gel	20		
					W.L.F.C.	6 1/2					
					p.H.	9.2					
					P.V.	18		Solid	8		
					Y.P.	24		C.A. ppm			
								CL ppm	200		

Reamers

Near bit

Near bit

Near bit

Blade

11

Cushion

10" D.C

10" D.C

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	P.M. KITTERICK	M. NAST	FRASKA	Kind	Depth	Reading
DERRICKMAN	Ed LANGMUIR	J. PARLEE	FRASKA	DROP	4724	1"
HELPER	T. JUDSON	J. SCHENK	VALQUETTE	LINE	4834	3/4"
HELPER	MACKNAK	A. ALEX	RINE			
HELPER	WALKER	D. COLLINS	COX			
FIREMAN						
TOOL PUSHER						

SOBC E PORCUPINE V.T. 13

19 78
 16 FT.
 4 FT.
 7 FT.
 5 FT.
 3 FT.
 9 FT.
 4 FT.
 0 FT.
 4 FT.
 FEET
 FEET
 FEET
 HOURS
 12:00 P.M.
 12
 50
 35
 9.5
 53
 ON
 PORT
 3
 9
 20
 6 1/2
 9.2
 8
 m
 200
 Reoing
 1"
 3/4"

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1	12.00	12.30		Run in D.C.
	12.30	12.45		RIG SERVICE
	12.45	2.00		SLIP AND CUT DRILL LINE
	2.00	3.30		RUN IN
	3.30	4.30		CLEAN OUT FROM 4378 TO 4441 RUN IN
	4.30	6.15		CLEAN 80 FT TO BIT
	6.15	8.00		DRILLING
TOUR 2				
		8.00	9.45	DRILLING
GEL 500 TM		9.45	10.15	RIG SERVICE, CHECKED B.O.P.'S
KELZAN 150 TM				RIG SAVERS
DOWSIDE 10 TM		10.15	3.30	DRILLING
		3.30	3.45	WORK ON PUMP
		3.45	4.00	DRILLING
TOUR 3				
		4.00	4.15	Drilling
GEL # 700		4.15	5.00	RIG SER, BOYS + JET COLLAR.
KELZAN # 150		5.00	5.45	Drilling
WATER 7"		5.45	6.15	WORK ON PUMP
		6.15	7.15	Drilling
		7.15	8.00	WORK P.P. + SURVEY @ 4834
		8.00	12.00	Drilling

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Bridge at 4378 - 4441 - put on Kelly & drilled out 80' fill on bottom

#1 pump down - bearing gone in main drive

Will rig up dewater to mix mud

Reamers & Stabilizers

Item	Quantity	Notes	Length	Remarks
Near bit	# 9049	-	9 1/2	cumulative hrs
Near bit	# 9830	Laid down	186 1/4	"
Near bit	# 9027	15 hrs	15	"
Blade	# 458	Laid down	170 1/4	"
"	# 451	15	129 1/4	"
Cushion	# 9028	15	209 1/2	"
10" D.C	51124	Laid down	194 1/2	"
10" D.C	66452	"	194 1/2	"

L. J. Kennedy
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G. J. ...* RIG NO. *14*

FIELD *WILDCAT* WELL NAME *E. Oklahoma LSD-13* SEC TWP Rge W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *MARCH 15 1971*

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS .. D.P. NO. <i>43</i>	<i>400763</i> FT	<i>419369</i> FT	<i>406789</i> FT
SINGLE .. D.P. NO. <i>1</i>	<i>3160</i> FT		<i>419369</i> FT
X-OVER SUB .. O.D.			
OTHER .. O.D.	<i>154</i> FT	<i>154</i> FT	<i>154</i> FT
DRILL COLLARS <i>7 1/2"</i> O.D. <i>2</i>	<i>3860</i> FT	<i>3860</i> FT	<i>49667</i> FT
DRILL COLLARS <i>7"</i> O.D. NO. <i>15</i>	<i>46565</i> FT	<i>46565</i> FT	
REAMER <i>9830</i> O.D. KIND <i>NEARBY</i>	<i>534</i> FT	<i>534</i> FT	<i>9028</i> <i>515</i> FT
STABILIZER <i>458</i> O.D. KIND <i>BLADE</i>	<i>460</i> FT	<i>460</i> FT	<i>463</i> FT
STAB <i>9028</i> KIND <i>CASHION</i>	<i>569</i> FT	<i>569</i> FT	<i>9028</i> <i>569</i> FT
BUMPER SUB			
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	<i>462065</i> FT	<i>471503</i> FT	
KELLY DOWN (BELOW R.B.)		<i>2400</i> FT	
DEPTH OF TOOLS		<i>473903</i> FT	

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>4060</i> FEET	<i>4739</i> FEET	<i>4739</i> FEET
DEPTH START OF TOUR	<i>4590</i> FEET	<i>4660</i> FEET	
FOOTAGE DRILLED	<i>470</i> FEET	<i>79</i> FEET	

DAY WORK	HOURS				HOURS							
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.	<i>45</i> <i>1200</i>	<i>45</i> <i>1100</i>	<i>45</i> <i>1200</i>	<i>48</i> <i>1200</i>	<i>78</i> <i>1200</i>	<i>78</i> <i>1200</i>	<i>48</i> <i>1200</i>					
ROTARY SPEED R.P.M.	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>					
WEIGHT ON BIT M lbs.	<i>32</i>	<i>32</i>	<i>32</i>	<i>32</i>	<i>32</i>	<i>32</i>	<i>32</i>					
MUD WEIGHT lb/gal	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.6</i>	<i>9.6</i>	<i>9.5</i>					
VISCOSITY sec/qt	<i>60</i>	<i>60</i>	<i>56</i>	<i>58</i>	<i>58</i>	<i>58</i>	<i>58</i>					
W.L.F.C. c.c./32nd	<i>7.0</i> <i>2/32</i>	<i>7.0</i> <i>2/32</i>		<i>8.5</i>		<i>6.5</i>						
p.H.	<i>9.0</i>	<i>9.0</i>	<i>8.5</i>	<i>8.5</i>		<i>8.5</i>						
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION
<i>13</i>	<i>8 3/4</i>	<i>61103</i>	<i>SMITH 3TS</i>	<i>2-4</i> <i>1-10</i>	<i>62 1/2</i>	<i>4009</i>	<i>4739</i>	<i>730</i>	<i>12</i>	<i>3-1-1</i>
<i>14</i>	<i>8 3/4</i>	<i>34298</i>	<i>SECURITY</i>	<i>3-10</i>		<i>4739</i>				

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.H.P.	psi	I.F.P.	psi	Time	<i>8 AM</i>
FROM		I.S.I.	mins	F.H.P.	psi	F.F.P.	psi	Mud Wt	<i>9.5</i>
TO		V.O.	mins	I.S.I.P.	psi	G.T.S.	psi	Visc	<i>58</i>
Recovery		F.S.I.	mins	F.S.I.P.	psi	F.T.S.	psi	A.V.	<i>36</i>
HOURS		RECOVERY						P.V.	<i>20</i>

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER <i>P. M. ...</i>	<i>A. HAST</i>	<i>FRASER</i>				
DERRICKMAN <i>Ed LANGMUIR</i>	<i>J. PARKER</i>	<i>FRASER</i>		<i>Witching</i>	<i>4557</i>	<i>1</i>
HELPER <i>J. Judson</i>	<i>J. SCHENK</i>	<i>VALQUINTE</i>			<i>4652</i>	<i>10</i>
HELPER <i>J. M. ...</i>	<i>A. MLEX</i>	<i>RINK</i>			<i>4739</i>	<i>10</i>
HELPER <i>G. ...</i>	<i>D. COLLINS</i>	<i>COX</i>				
FIREMAN						
TOOL PUSHER <i>D. ...</i>						

U.C.C. E
M.C. and CHEMICAL
Kind
TOUR 1
TOUR 2
TOUR 3
GEL
CAUSTIC
KELZIN
Dowcide B

Temp at ...
Lab to ...
2-7 1/2" D.C.
#9830
New bit reamer
#458
then stab
Reamers a
Near bit

SOBC E PORCUPINE Y.T. 13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
1971	Kind	Amount		
OUR	TOUR 1		12:00 12:45	WORK ON Pump No 2
9 FT.			12:45 1:00	RIG SERVICE + REPAIRS
9 FT.			1:00 3:00	DRILLING
4 FT.				
7 FT.				
5 FT.	TOUR 2			
3 FT.		8:00	8:30	RIG SERVICE, CHECKED B.O.P.'s
9 FT.	GEL	500		RIG SAVERS
FT.	CAUSTIC	50	8:30 8:45	RUN SURVEY @ 4652
FT.	KELZIAN	150	8:45 3:30	DRILLING
FT.	Dowcide "A"	10	3:30 4:00	DROP SURVEY, CHANGED SAVER SUB
FT.			1:00 5:00	HOIST BIT
FT.	TOUR 3		5:00 6:45	Pick up Kelly & Work Tight SPOT
FEET			6:45 7:00	Blew Kelly
FEET			7:00 8:30	HOIST BIT
FEET			8:30 10:00	Lay Down 7 3/4 D/C + STAB + REAMER.
HOURS			10:00 12:00	Pick up BTA Hole D/C STAB + REAMER.
12:00 P.M.				RUN IN D/C
				Blind Rams OK.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

FEET
FEET
FEET
HOURS
ON
PORT
Gel
6 1/2
9.0
8
m.
m.
Reading
1
10
10

Trip at 4739 to change bit - buttons gone on spade cone
Laid down Picked up

9	2 - 7 3/4" D.C	38.60	1 - 7" bottom hole D.C	31.02
20	#9830		#9027	
6 1/2	Near bit reamer	5.34	1 - New bit reamer	5.15
	#45B		#451	
9.0	7 ten stubs	4.60	1 - 7 ten stubs	4.63
8	Reamers and stabalizers			
m.	Near bit	9.49	9 1/4 Cumulative hrs	
m.	"	9.830	186 1/4	
Reading	"	13 3/4 hrs	170 1/4	
1	Blade	458	13 3/4	
10	"	451	"	114 1/4
10	Cushion	9028	13 3/4	182 1/2
	10" D.C	5112.4	13 3/4	194 1/2
	10" D.C	6645.2	13 3/4	194 1/2

J. J. J. J.
Signature Company Engineer

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO. **14**
 FIELD **WILD CAT** WELL NAME **E PORCUPINE** SD **1-13** SEC TWP Rge W
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 14 1971**

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO. 41	387793 FT.	NO. 41	387793 FT.	NO. 42	397252 FT.
SINGLE	D.P.	NO. 1	3173 FT.	NO. 1	3 FT.	NO. 2	6331 FT.
X-OVER SUB	O.D.		154 FT.	42	397244 FT.		154 FT.
OTHER	O.D.						
DRILL COLLARS	7 3/4 O.D.	2	3860 FT.		154 FT.		46265 FT.
DRILL COLLARS	7" O.D.	NO. 15	46565 FT.	NO	3860 FT.	NO	3860 FT.
REAMER	#9830 O.D.	KIND NEAR BIT	534 FT.	KIND	46565 FT.	KIND	534 FT.
STABILIZER	#458 O.D.	KIND BLADE	460 FT.	KIND	534 FT.	KIND	460 FT.
STABILIZER	#9028	KIND Cuttings	569 FT.	KIND	460 FT.	KIND	569 FT.
BUMPER SUB.					569 FT.		
BIT OR CORE BARREL			443108 FT.				
TOTAL D.P. & TOOLS					449386 FT.		455731 FT.
KELLY DOWN (BELOW R.B.)			16 FT.		2700 FT.		3305 FT.
DEPTH OF TOOLS			444708 FT.		452086 FT.		459036 FT.

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	4447 FEET	4520 FEET	4590 FEET
DEPTH START OF TOUR	4335 FEET	4447 FEET	4520 FEET
FOOTAGE DRILLED	112 FEET	73 FEET	70 FEET

	DAY WORK	HOURS				HOURS				HOURS			
		2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	s.p.m. p.s.i.	52 1600	52 1600	✓	✓	1600 52	1600 52	1600 52	1600 52	52 1600	52 1600	52 1600	48 1700
ROTARY SPEED	R.P.M.		50	✓	✓	50	50	50	50	48	48	48	48
WEIGHT ON BIT	M lbs.		3035	✓	✓	32	32	32	32	32	32	32	32
MUD WEIGHT	lb/gal	9.4	9.4	✓	✓	9.4	9.3	9.3	9.3	9.5	9.5	9.5	9.5
VISCOSITY	sec/qt	54	60	✓	✓	60	54	52	52	62	60	62	62
W.L./F.C.	c.c./32nd	2.4	2.4	✓	✓	2.4	2.4	2.4	2.4	2.4	2.4	2.4	2.4
p.H.		7.0	✓	✓	✓	8.5	9.0	9.0	9.0				9.0
MUD LEVEL IN TANKS	Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT./HR	BIT CONDITION
13	8 3/4	64908	SMITH 3TS	24 110		4009				

CORE	No.	No.	DST No	FROM		TO		MUD ENGINEER'S REPORT					
				PREFLOW	mins.	I.F.P.	p.s.i.	I.F.P.	p.s.i.	Time	Alk Tr	Int Gel	10 Min Gel
FROM				I.S.I.	mins.	F.H.P.	p.s.i.	F.P.P.	p.s.i.	Mud Wt	9.4	5	10
TO				V.O.	mins.	I.S.I.P.	p.s.i.	G.T.S.	p.s.i.	Visc	63	7.0/2	
Recovery				F.S.I.	mins.	F.S.I.P.	p.s.i.	F.T.S.	p.s.i.	A.V.	35	8.5	
HOURS				RECOVERY						P.V.	21	7.5	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	P.M. TIERIK	A. NAST	FANSEK			
DERRICKMAN	ED LANGMUIR	J. SCHENK	F. KASAK	Wireline	4305	1/2
HELPER	4 Judson	D. COLLINS	V. LIQUETE		4463	1°
HELPER	J. MACKNAK	A. ALEX	R. RINE		4557	1°
HELPER	G. ALGER	G. RINE	COX			
FIREMAN						
TOOL PUSHER	S. Pyenkamp					

SOBC
 Kind
 TOUR 1
KELZANAL
 TOUR 2
CAUSTIC
 TOUR 3
 10:00 AM
 10:00 AM
 2:00 PM
 6:00 PM
 10:00 PM
 12:00
 Recorder
 Near bit
 Blade
 Cushion
 10' D.C.
 10' D.C.

SOC E PORUPINE, Y.T. F-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1				
2 FT.	KELZANAL	250	12:00 - 2:45	DRILLING
1 FT.			2:45 - 3:00	RIG SERVICE
5 1/4 FT.			3:00 - 3:00	Drilling
TOUR 2				
6 1/2 FT.			8:00 - 10:30	DRILLING
20 FT.	CAUSTIC	50	10:30 - 11:00	RIG SERVICE, CHECKED B.O.P.'S,
34 FT.			11:00 - 11:30	RIG SAVERS, KELLY COCK
60 FT.			11:30 - 4:00	RUN SURVEY @ 4463
84 FT.				DRILLING
TOUR 3				
0 FT.			11:00 - 5:00	Drilling
9 FT.			5:00 - 5:15	RIG SERVIC P.L.P. RANA & HYDRILL
31 FT.			5:15 - 7:45	Drilling
55 FT.			7:45 - 9:00	SURVEY @ 41557
86 FT.			9:00 - 9:15	Drilling
			9:15 - 9:45	BRAKE PUMP CHAIN & CHANGE OF PUMPS
			9:45 - 11:30	Drilling
			11:30 - 12:00	WOK ON #2 PUMP

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Desiliter

10:00 am	Underflow 10.1 @ 2gpm	Overflow 9.3	Pressure 45"
2:00 pm	10.1 @ 1g/35sec	" 9.3	" 45"
6:00 pm	" 9.9 @ 1g/35sec	" 9.4	" 45"
10:00 pm	" 10.0 @ 1g/35sec	" 9.4	" 45"
12:00	" 10.0 @ 1g/35sec	" 9.4	" 45"

Reamers & Stabilizers

Near bit	9049	-	Cumulative hrs	9 1/2
"	9830	20 1/4 hrs	"	172 1/2
Blade	458	20 1/4 "	"	156 1/2
"	451	-	"	114 1/4
Cushion	9028	20 1/4	"	168 3/4
10" D.C.	51124	20 1/4	"	280 3/4
10" D.C.	66452	20 1/4	"	280 3/4

L. J. [Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD **WILD CAT** WELL-NAME **F. PORCUPINE** LSD **4-13** CONTRACTOR **G.P. LINDLING** RIG NO **14**
 DRILLING DEEPENING COMPLETING SEC TWP Rge W
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 13/71** 1971

SOBC E 1
MUD and CHEMICAL Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO. 38	359454 FT	NO. 39	372020 FT	NO. 40	378351 FT
SINGLE	D.P.	NO. 2	6227 FT	NO. 1			
X-OVER SUB	O.D.		154 FT		154 FT		124 FT
OTHER	O.D.						
DRILL COLLARS	7 3/4 O.D.	2	3860 FT		3860 FT		3860 FT
DRILL COLLARS	7 O.D.	NO. 15	46565 FT	NO	46565 FT	NO	46565 FT
REAMER	E 9830 O.D.	KIND MARSH	534 FT	KIND	534 FT	KIND	534 FT
STABILIZER	E 450 O.D.	KIND BLADE	460 FT	KIND	460 FT	KIND	460 FT
JAR	STAB F 9028	KIND BLADE	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB.		KIND CUSHION		KIND		KIND	
BIT OR CORE BARREL							
TOTAL D.P. & TOOLS			417823 FT		424162 FT		430493 FT
KELLY DOWN (BELOW R.B.)			11 FT		2100 FT		3105 FT
DEPTH OF TOOLS			418923 FT		426262 FT		433598 FT

TOUR 1
Downside B

TOUR 2
CAUSTIC

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	4189 FEET	4262 FEET	4335 FEET
DEPTH START OF TOUR	4090 FEET	4189 FEET	4262 FEET
FOOTAGE DRILLED	99 FEET	73 FEET	73 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	s.p.m. 52 p.s.i. 1450								52 1450	52 1450	52 1450	1600
ROTARY SPEED	R.P.M. 50				50	50	50	50	50	50	48	48
WEIGHT ON BIT	M lbs. 32				32	32	32	32	32	32	32	32
MUD WEIGHT	lb/gal 9.3				9.3	9.4	9.3	9.3	9.3	9.3	9.3	9.3
VISCOSITY	sec/qt 52				55	55	53	53	53	54	53	56
W.L./F.C.	c.c./32nd 10 2/32				1.0	-	1.0	-				
p.H.					9.0	-	9.0	-				
MUD LEVEL IN TANKS	Ft.-Ins											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT-HR	BIT CONDITION
1198	3 1/2	64908	SMITH 3JS	2-9 1-10		4009				
					28 1/2		4335	326		112

CORE No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	IHP	psi	I.F.P.	psi	Time 9 AM	Aik Trace
FROM		ISI	mins	FHP	psi	F.F.P.	psi	Mud Wt 9.4	Int Gel 5 10 Min Gel 12
TO		VO	mins	ISIP	psi	G.T.S.	psi	Visc 55	W.L.F.C. 7.4/2
Recovery		FSI	mins	FSIP	psi	F.T.S.	psi	A.V. 3.65	p.H. 8.5
HOURS		RECOVERY						P.V. 23	Solid 8

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Y.P.	DEVIATION RECORD
DRILLER	P. McKEETICK	A. HARST	FRASER		Kind
DERRICKMAN		J. SCHENK	FRASER	4178	Depth
HELPER	J. Judson	D. COLLINS	VALQUETTE	4305	Reading
HELPER	J. MACKNAK	A. ALEX	RINE		
HELPER		A. RINE	COX		
FIREMAN					
TOOL PUSHER	D. Pyenka				

Desired Un

Reamer

Near Bit

Near Bit

Blade

Blade

Cushion

10" D.C

10" D.C

SOBC E PORCUPINE X.T 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	7:30	Drilling
Downside B	10 #	7:30	8:00	WORK DONE FOR SURVEY 4178 (1/4)
TOUR 2		8:00	8:15	RIG SERVICE, CHECKED B.O.P.'S
CAUSTIC	50	8:15	1:30	* RIG SAVERS
		1:30	2:00	DRILLING
		2:00	4:00	REPAIR FUEL LINE
				DRILLING
TOUR 3		4:00	5:45	Drilling
		5:45	6:00	RIG SERVICE BOP
		6:00	7:30	Drilling
		7:30	10:00	SURVEY @ 11305
		10:00	12:00	Drilling

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Smy on connections

16.00
48
32
93
56

Rate 5
Gel 12
7.4/2
8.5
8
Dexter Underflow 10.0 @ 90/3000 Overflow 9.3 Suction 9.4 10 PM

Reamers & Stabilizers

Reading			Cumulative Per
1/4	Near Bit 9049	- 22	91 1/2
1/2	Near Bit 9830	22 1/4	112 1/4
	Blade 458	22 1/4	136 1/4
	Blade 451	-	114 1/4
	Cushion 9028	22 1/4	148 1/2
	10" D.C 67124	22 1/4	260 1/2
	10" D.C 66452	22 1/4	260 1/2

L. J. Gumbel
SIGNATURE COMPANY ENGINEER

SOBC

E. PORCUPINE Y.T. 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	2:30	DRILLING
		3:30	3:45	RIG SERVICE
		3:45	8:00	DRILLING
TOUR 2		8:00	8:15	RIG SERVICE, CHECKED B.O.P.'S,
				RIG SAVERS
		8:15	11:00	DRILLING
		11:00	11:15	BLOW KELLY
		11:15	4:00	TRIP FOR NEW BIT
TOUR 3		4:00	5:00	REAN TO BOTTOM
		5:00	6:45	DRILLING
CEL #	16:00	6:45	7:15	SURVEY & RIG SERVICE
KELZAN #	2:00	7:15	12:00	DRILLING
WATER	50 GALS			

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Trip at 4009 to change bit - 3rd stb pulled little tight
 Trip in O.K. - no pull on bottom

Desilter

Depth	Time Underflow	Rate	Overflow	Shaker
3947	12:30	9.7	19/3000	9.2
3990	7:00	9.7	19/700	9.2

Reamers & Stabilizers

Kind	#	Hrs	Cumulative Hrs
Ream bit	9049	-	91 1/2
Ream bit	9230	17	130 1/4
Blade	458	17	114 1/4
Blade	451	17	114 1/4
Cushion	9028	17	126 1/2
10" D.C.	61124	17 17	238 1/2 238 3/4
10" D.C.	66452	17 17	238 1/2 238 1/2

Blade stabilizer 15' up
 Cushion 43' up.

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO. *14*

FIELD *WILD CAT* WELL NAME *E PORCUPINE L&S-13* SEC TWP Rge W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT *MARCH 11* 1971

6086

MUD and CHEMICAL

Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR				
STANDS .. D.P. NO. <i>34</i>	<i>321824</i>	FT.	NO. <i>35</i>	<i>331272</i>	FT.	NO. <i>36</i>	<i>340649</i>	FT.	
SINGLE .. D.P. NO. <i>1</i>	<i>3182</i>	FT.	NO.		FT.	NO.		FT.	
X-OVER SUB .. <i>7</i> O.D.		FT.		<i>154</i>	FT.		<i>154</i>	FT.	
OTHER .. O.D.	<i>3182</i>	FT.			FT.			FT.	
DRILL COLLARS <i>7 1/4</i> O.D.	<i>2</i>	<i>3860</i>	FT.	<i>3860</i>	FT.		<i>3860</i>	FT.	
DRILL COLLARS <i>7</i> O.D.	NO. <i>15</i>	<i>46565</i>	FT.	NO. <i>15</i>	<i>46565</i>	FT.	NO. <i>15</i>	<i>46565</i>	FT.
REAMER <i>H 9830</i> O.D.	KIND <i>NEAR BIT</i>	<i>534</i>	FT.	KIND	<i>534</i>	FT.	KIND	<i>534</i>	FT.
STABILIZER <i>H 45</i> O.D.	KIND <i>BLADE</i>	<i>460</i>	FT.	KIND	<i>460</i>	FT.	KIND	<i>460</i>	FT.
JAWBAR <i>9028</i>	KIND <i>CUSHION</i>	<i>569</i>	FT.	KIND	<i>569</i>	FT.	KIND	<i>569</i>	FT.
BUMPER SUB.			FT.			FT.			FT.
BIT OR CORE BARREL			FT.			FT.			FT.
TOTAL D.P. & TOOLS			FT.	<i>383414</i>	FT.		<i>392799</i>	FT.	
KELLY DOWN (BELOW R.B.)	<i>42</i>	FT.		<i>3600</i>	FT.		<i>1500</i>	FT.	
DEPTH OF TOOLS	<i>381348</i>	FT.		<i>387014</i>	FT.		<i>394276</i>	FT.	

TOUR 1

GEL
CLASSIC
Kellogg

TOUR 2

GEL

TOUR 3

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	<i>2813</i>	FEET	<i>3870</i>	FEET	<i>3943</i>	FEET
DEPTH START OF TOUR	<i>3813</i>	FEET	<i>3813</i>	FEET	<i>3870</i>	FEET
FOOTAGE DRILLED		FEET	<i>57</i>	FEET	<i>72</i>	FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.		<i>1200</i>	<i>1200</i>		<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>	<i>52</i> <i>1600</i>
ROTARY SPEED R.P.M.					<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>	<i>50</i>
WEIGHT ON BIT M lbs.		<i>30</i>	<i>30</i>		<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>
MUD WEIGHT lb/gal		<i>9.4</i>	<i>9.4</i>		<i>9.3</i>	<i>9.4</i>	<i>9.3</i>	<i>9.3</i>	<i>9.2</i>	<i>9.3</i>	<i>9.2</i>	<i>9.2</i>
VISCOSITY sec/qt		<i>12</i>	<i>58</i>		<i>80</i>	<i>80</i>	<i>63</i>	<i>63</i>	<i>58</i>	<i>58</i>	<i>51</i>	<i>51</i>
W.L./F.C. c.c./32nd		<i>70</i>			<i>6.2</i>	<i>-</i>	<i>7.2</i>	<i>-</i>				
p.H.		<i>9</i>			<i>10.0</i>	<i>10.0</i>	<i>10.0</i>	<i>10.0</i>				
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION
<i>12</i>	<i>8 3/4</i>	<i>91035</i>	<i>588</i>	<i>2.9</i> <i>1-10</i>	<i>34</i>	<i>3754</i>	<i>3870</i>	<i>116</i>	<i>4.7</i>	<i>IN</i>

NEAR BIT
NEAR BIT

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
TYPE		PREFLOW	mins. IHP	p.s.i. IFP	p.s.i. Time	AM	PM	Alk
FROM		IS.I.	mins. FHP	p.s.i. FFP	p.s.i. Mud Wt.	10 Min Gel		
TO		V.O.	mins. ISIP	p.s.i. GTS.	p.s.i. Visc.	W.L.F.C.		
Recovery		F.S.I.	mins. FSIP	p.s.i. FTS.	p.s.i. AV	p.H.		
HOURS		RECOVERY			PV	Solid %		

BLADE
BLADE
CUSHION
10" D.C.
30" D.C.

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<i>P. McKittrick</i>	<i>D. NAST</i>	<i>Colin FRASER</i>			
DERRICKMAN	<i>Ed Langman</i>	<i>J. SCHENK</i>	<i>CAROLD FRASER</i>	<i>3834</i>	<i>10</i>	
HELPER	<i>F. Johnson</i>	<i>A. ALLEX</i>	<i>R. CHARD Kellogg</i>			
HELPER	<i>J. MACKNAK</i>	<i>M. RINE</i>	<i>MERV RINE</i>			
HELPER	<i>Borden Alger</i>	<i>G. ALGER</i>	<i>RANDY COX</i>			
FIREMAN						
TOOL PUSHER	<i>D. Popelkamp</i>					

8086 W.M. E PORCUPINE V.T. 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE	
971..	Kind	Amount	12 ⁰⁰	1	LOAD OUT PACKER
972..	TOUR 1		1 ⁰⁰	3 ³⁰	RUN IN CLEAN 45' To B.T.L.
973..	GEL	2400	3.30	8 ⁰⁰	LIKE COND MUD
974..	CAWSEC	100			
975..	KELZAN	100			
976..	TOUR 2				
977..	GEL	400	8 ⁰⁰	8 ³⁰	RIG SERVICE, CHECKED B.O.P.'S,
978..			8 ³⁰	12 ⁰⁰	RIG SAVERS, CROWN-O-MATIC
979..			12 ⁰⁰	12 ¹⁵	DRILLING
980..			12 ¹⁵	4 ⁰⁰	RUN SURVEY @ 3834
981..					DRILLING
982..	TOUR 3				
983..			14 ⁰⁰	14 ¹⁵	Drilling
984..			14 ¹⁵	14 ³⁰	R.O. SERVICE
985..			14 ³⁰	10 ⁴⁵	Drilling
986..			10 ⁴⁵	11 ¹⁵	6" OH PIPE & SURVEY
987..			11 ¹⁵	12 ⁰⁰	Drilling

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DESILTER RUN 16 Lm. OUTPUT 192L - 32 sec.
 UNDER FLOW WT. 9.9 OVERFLOW WT 9.2 SHANKER BOX WT 9.3 VIS 52 BASINER PRESSURE 42 LBS.

READERS & STABILISERS.

KIND	#	HRS. TODAY	CAL HRS.
NEAR BIT	4049	17 1/4	97 1/2
NEAR BIT	9830	14 1/4	113 1/4
BLADE	458	-	97 1/4
BLADE	451	14 1/4	114 1/4
CUSHION	9028	14 1/4	209 1/2
10" D.C	51134	14 1/4	221 1/2
30" D.C	66451	14 1/4	221 1/2

[Handwritten signature]
 Signature Company Engineer

SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD Wildcat WELL NAME _____ LSD EAST SEC 10 TWP 13 Rge W W W
 DRILLING DEEPENING COMPLETING EAST 10 13
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT March 10 1977

M.D. and CHEMICAL Kind

DRILLING ASSEMBLY	END OF MORNING TOUR	END OF DAYLIGHT TOUR	END OF AFTERNOON TOUR
STANDS " D.P. NO. <u>34</u>	<u>321824</u> FT	<u>321360</u> FT	<u>321824</u> FT
SINGLE " D.P. NO. <u>2</u>	<u>6316</u> FT		<u>6316</u> FT
X-OVER SUB " O.D.	<u>154</u> FT		
OTHER " O.D.			<u>154</u> FT
DRILL COLLARS " <u>7 1/4</u> O.D. <u>2</u>	<u>3860</u> FT		<u>3860</u> FT
DRILL COLLARS " <u>7 1/4</u> O.D. NO. <u>15</u>	<u>46565</u> FT	NO <u>14</u>	NO <u>15</u> <u>46565</u> FT
REAMER <u>H 9830</u> O.D. KIND <u>NEARBY</u>	<u>534</u> FT	KIND	<u>534</u> FT
STABILIZER <u>H 452</u> O.D. KIND <u>BLAKE</u>	<u>460</u> FT	KIND	<u>460</u> FT
<u>SUN'S</u> <u>H 902B</u> KIND <u>CUSHION</u>	<u>569</u> FT	KIND	<u>569</u> FT
<u>PACKER</u>			<u>7475</u> FT
BIT OR CORE BARREL			
TOTAL D.P. & TOOLS	<u>380282</u> FT		<u>380282</u> FT
KELLY DOWN (BELOW R.B.)	<u>1100</u> FT		<u>11</u> FT
DEPTH OF TOOLS	<u>381382</u> FT		<u>381382</u> FT

TOUR 1

TOUR 2

TOUR 3

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<u>3813</u> FEET	<u>3813</u> FEET	
DEPTH START OF TOUR	<u>3813</u> FEET	<u>3813</u> FEET	<u>3813</u> FEET
FOOTAGE DRILLED	<u>0</u> FEET	<u>0</u> FEET	<u>0</u> FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i. <u>40</u> <u>1000</u>	TESTING											
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs. <u>-</u>												
MUD WEIGHT lb/gal <u>9.5</u>												
VISCOSITY sec/qt <u>70</u>												
W.L./F.C. c.c./32nd <u>2</u> <u>7</u>												
p.H. <u>9.5</u>												
MUD LEVEL IN TANKS Ft.-Ins.												

DST # 3

RAW

16.6 #

FOUND

LOST

FOR 10

P.M. F.

WAS PU

DROGGED

RE

LOW

HER

PK

Misc

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FOOTAGE	FT/HR	BIT CONDITION
<u>13</u>	<u>B3 1/4</u>	<u>912035</u>	<u>SECURITE 588</u>	<u>7-9</u>	<u>9 3/4</u>	<u>3754</u>	<u>3813</u>	<u>59</u>	<u>6.0</u>	<u>2 1-1</u>

CO#E	No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE			PREFLOW:	mins. I.H.P.	p.s.i. I.F.P.	Time	A.M. PM	AK		
FROM			I.S.I.	mins. F.H.P.	p.s.i. F.F.P.	Mud Wt.		Int Gel		
TO			V.O.	mins. I.S.I.P.	p.s.i. G.T.S.	Visc		W.L.F.C.		
Recovery			F.S.I.	mins. F.S.I.P.	p.s.i. F.T.S.	A.V.		p.H.		
HOURS			RECOVERY:			P.V.		Solid		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	<u>P. McQuinn</u>	<u>A. NAST</u>	<u>FRASER</u>			
DERRICKMAN	<u>E. LINGMIR</u>	<u>J. SCHENK</u>	<u>FRASER</u>			
HELPER	<u>F. J. WISN</u>	<u>D. COLLINS</u>	<u>VALIQUITH</u>			
HELPER	<u>J. MACKIN</u>	<u>A. ALIX</u>	<u>RINE</u>			
HELPER	<u>G. ALGAR</u>	<u>J. RANGER</u>	<u>COX</u>			
FIREMAN						
TOOL PUSHER	<u>R. Sigurdson</u>					

SOUR W/ EAST PRODUCE 77 J 15

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
9 7/8		1 00	2 30	Run in, CUBAN 15' TO 2070'
UR		2 30	4 00	CIRC. TO TEST, CUMUL. MUD
4 FT		4 00	7 00	BLOW TWO LINES + HOIST
6 FT		7 00	8 10	Run in S.D.C., MAKE UP PACKER
4 FT				
0 FT				
5 FT				
4 FT	TOUR 2	8 00	9 30	MAKE UP PACKER
0 FT		9 30		RIG SERVICE, CHECKED B.O.A.'S, RIG
9 FT			9 45	SAVERS, MOTOR SHUT-OFF'S
FT		9 45	12 00	RUN IN W/ PACKER
FT		12 00	1 00	RIG UP TO TEST
2 FT		1 00	3 30	TESTING
FT		3 30	4 00	RIG OUT TESTING HEAD
2 FT				& BREAK PACKER FREE
	TOUR 3			
FEET		11 30	7 15	HOIST PACKER
FEET		7 15	8 00	BREAK P/PACKER TO GET CHARIS
FEET		8 00	9 15	WAIT ON CHARIS TO BE REED
HOURS		9 15	10 45	LAY DOWN PACKER
2:00 P.M.		10 45	11 30	RUN IN DP
		11 30	12 00	LOAD OUT PACKER & SERVICE

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DST # 3 3679-3813 BLACKIE Note: Mud NOT CIRCULATED AFTER 4:00 AM

DUAL BOTTOM - HARD TEST

RAW T.G. EASTLAND TESTING TOX ON 279' 7" x 2 7/8" DRILL COLLARS AND 4 1/2" - 16.6 # F.H. DRILL PIPE (155' 7" D.C.'S + 22' PEAKS (+ WELDED ETC) WELD PACKERS).

FOUND BOTTOM 20' HIGH. HEADED UP, OPENED TOX FOR PREFLOW, SKIPPED TO BOTTOM (LAST TEST 4-6 BLI MUD WHILE SKIPPING). VALVE WAS OPENED AT 12:45 PM FOR 10 MIN, INITIALLY SHUT IN AT 12:55 PM FOR 30 MIN, OPENED AT 1:25 PM FOR 60 MIN AND CLOSED IN FOR FINAL AT 2:25 FOR 60 MIN. TOX WAS PULLED LOOSE WITH 32000 # DUAL SINKING WEIGHT W/ 3:25 PM. TOX DRAGGED FIRST 5 STANDS.

RECEIVED GOOD INITIAL PUFF, FINE AIR BLOW ON PREFLOW. VERY FAINT AIR BLOW DEAD IN 5 MIN ON FLOW PERIOD.

RECORDED 595' DRILLING AND (WEIGHT 9.3, RFLR 3.0 @ 22.1')

Pressures:	IHP 1771	ISIP 790	Premud 383
	FHP 1771	FSIP 1099	IEP 386
			IEP 924

MISCAN: Pressures + CIRCULS DO NOT AGREE WITH RECORD

DESIGNER DATA: DID NOT RUN TODAY

REMARKS: SCHEDULED NO HOLES TODAY

OTHER: ONE FLOW ENGINE DOWN LAST 24 HOURS

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **C.P. Drilg.** RIG NO **14.**

FIELD **Wildcat.** WELL NAME **E. Porcupine MB3**

SEC TWP Rge W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **March 9 1971**

SOBC

M and CHEMICAL Kind

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS	D.P.	NO	3282 3218 FT	NO 34	3218 24 FT	NO 34	3218 24 FT
SINGLE	D.P.	NO. 34	3218 24 FT	NO 2	63 16 FT	NO 2	63 16 FT
X-OVER SUB	O.D.	2	63 16 FT				
OTHER X-O SUB	O.D.		154 FT		154 FT		154 FT
DRILL COLLARS	7 3/4 O.D.	2	38 60 FT	2	38 60 FT	2	38 60 FT
DRILL COLLARS	7 O.D.	NO. 15	46 56 5 FT	NO 15	46 56 5 FT	NO 15	46 56 5 FT
REAMER # 9930	O.D.	KIND NEAR RT	534 FT	KIND	534 FT	KIND	534 FT
STABILIZER # 458	O.D.	KIND BLADE	460 FT	KIND	460 FT	KIND	460 FT
5003 # 9028		KIND CUSHION	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB.			FT		FT		FT
BIT OR CORE BARREL			FT		FT		FT
TOTAL D.P. & TOOLS			380 282 FT		380 282 FT		380 282 FT
KELLY DOWN (BELOW R.B.)			11 00 FT		11 FT		11 FT
DEPTH OF TOOLS			381 382 FT		381 382 FT		381 382 FT
TOUR		MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		381 3 FEET		381 3 FEET		381 3 FEET	
DEPTH START OF TOUR		381 3 FEET		381 3 FEET		381 3 FEET	
FOOTAGE DRILLED		0 FEET		0 FEET		0 FEET	

Drilling String

TOUR 1
1400 # Gel

TOUR 2

TOUR 3

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.												
p.H.												
MUD LEVEL IN TANKS												

TEST + TRIP

94 94 Trip.

60 61

DST #2

Ran T.
16.60 #
10' HIGH

ESTIMATE
PM FOR
1:35 PM
Hole To
4:15 PM

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT-HR	BIT CONDITION
13	5 3/4	917035	Security SBB	2-9 1-10	9 3/4	3754	3813	59 60	2-1-1	

CORE	No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT						
TYPE			PREFLOW	mins	IHP	p.s.i.	I.F.P.	p.s.i.	Time	AM	PM	Aik
FROM			I.S.I.	mins	FHP	p.s.i.	F.F.P.	p.s.i.	Mud Wt.	9.4		Int Gel 10 Min Gel
TO			V.O.	mins	I.S.I.P	p.s.i.	G.T.S.	p.s.i.	Visc	61		W.L.F.C.
Recovery			F.S.I.	mins	F.S.I.P	p.s.i.	F.T.S.	p.s.i.	A.V.			p.H.
HOURS			RECOVERY						P.V.			Sand C.A. ppm C.L. ppm

SIGNATURES	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR		DEVIATION RECORD			
	Kind	Depth	Reading	Kind	Depth	Reading	Kind	Depth	Reading	
DRILLER	G. Soregren			P. McKittick			A. NAST			
DERRICKMAN	J. Pedersen			Ed LANGMUIR			J. SCHENK			
HELPER	R. ROGERS			F. Judson			D. COLLINS			
HELPER	J. RANGER			G. ALGER			A. ALEX			
HELPER	D. COLLINS			J. MacKAY			J. RANGER			
FIREMAN										
TOOL PUSHER										

Recovery
AT
Recovery
Press.

MISRUN

DESILTER
RECOVER

SOBC WM. E. Porcupine YT 1-13.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971		12 ⁰⁰	2 ⁰⁰	Circ. Hole Cond. To D.S.T. #2.
UR	TOUR 1	2 ⁰⁰	2 ²⁰	Blow Kelly Break Kelly Hose Off + Re Blow.
4 FT	1400 # Gel.	2 ²⁰	5 ²⁰	Hoist B. # 92 (1 motor) 25 wet sleds.
6 FT		5 ²⁰	8 ⁰⁰	Run In 5 Collars + Make Up Packer.
4 FT				
0 FT				
5 FT				
4 FT	TOUR 2	8 ⁰⁰		MAKE UP PACKER RUN IN SLOW
0 FT			1 ⁰⁰	HEAD UP PACKER
4 FT		1 ⁰⁰	1 ³⁰	PACKER SHUT IN
FT		1 ³⁰	4 ⁰⁰	PACKER OFF
FT				
2 FT				
FT				
2 FT	TOUR 3	4 ⁰⁰	5 ⁰⁰	BREAK DOWN TESTING HEAD
FEET		5 ⁰⁰	5 ¹⁵	RIG SERVICE
FEET		5 ¹⁵	7 ³⁰	HOIST PACKER (ONE MOTOR)
FEET		7 ³⁰	9 ⁴⁵	BREAK DOWN PACKER
HOURS		9 ⁴⁵	10 ³⁰	REPLACE CUTTERS IN REAMER
12 00 P.M.		10 ³⁰	11 ¹⁵	RUN IN DRILL COLLARS
		11 ¹⁵	12 ⁰⁰	SWAP DRG LINE

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DST #2 3639-3813 BLACKIE (DUAL CONVENTIONAL TEST) Note: Hole NOT CIRCULATED AFTER 2:00 AM

Ran T.G. EASTLAND TESTING TOOL ON 279' 7" x 2 1/8" DRUM COLLARS AND 4 1/2" - 16.62 # F.H. DRUM PIPE (155' 7" D.C.'S + 12' PERES BELOW PACKERS). FOUND BOTTOM 10' HIGH. HEADED UP, OPENED TOOL FOR PREFLOW, SKIPPED TO BOTTOM (LUST ESTIMATED 6 bbl ANNULUS FULL WHILE SKIDDING). VALVE WAS OPENED AT 12:57 PM FOR 8 MIN, INITIALLY SHUT IN AT 1:05 PM FOR 30 MIN, OPENED AT 1:35 PM FOR 60 MIN, AND CLOSED IN FOR FINAL AT 2:35 PM FOR 100 MIN. TOX WAS PULLED LOOSE AND FREE WITH 22000 # JUCK STRING WEIGHT AT 4:15 PM.

Recovered GOOD INITIAL PUFF, FAIR AIR FLOW ON PREFLOW AND FLOW PERIOD. DEAD AT END OF FINAL SHUT IN

Recovered 1035' NATORY (SUGARY) DRILLING AND WEIGHT 9.2, Rfile 3.1 @ 85°F

Pressures:	IHP	1753	ISIP	1645	PREFLOW	310
	FHP	1753	FSIP	1524	IFP	1631
					FEP	1618

Pressures FROM OUTSIDE RECORD @ 3646 (FIELD READINGS)

MISRUN: BELIEVED TOX PLUGGING (FLOW PRESSURES IN PARTICULAR DO NOT REQUEST RECOVERY)

DESILTER DATA: DID NOT RUN TODAY

REAMERS + STABILIZERS: NO HOURS TODAY (CHANGED CUTTERS ON 9830 AFTER CUM 99 HRS)

SIGNATURE COMPANY ENGINEER

Valp Ham

TOUR REPORT

CONTRACTOR *G.P. Drig.* RIG NO *14*

FIELD *Wildcat* WELL NAME *E. Porcupine #133* SEC TWP Rge W
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *March 8 1971*

SOBC.
 M and CHEMICAL
 Kind

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS " D.P.	NO.	<i>321834</i> FT.	NO. <i>34</i>	<i>321824</i> FT.	NO.	<i>328140</i> FT.
SINGLE " D.P.	NO.		NO. <i>4</i>	<i>3180</i> FT.		
X-OVER SUB " O.D.		<i>154</i> FT.				
OTHER " O.D.			<i>4</i>	<i>154</i> FT.		<i>154</i> FT.
DRILL COLLARS <i>7 3/4</i> O.D.	<i>2</i>	<i>3860</i> FT.	<i>2</i>	<i>3860</i> FT.		<i>3860</i> FT.
DRILL COLLARS <i>7</i> O.D.	NO. <i>15</i>	<i>46565</i> FT.	NO. <i>15</i>	<i>46565</i> FT.	NO.	<i>46565</i> FT.
REAMER <i>#98300</i> O.D.	KIND	<i>534</i> FT.	KIND	<i>534</i> FT.	RIND	<i>534</i> FT.
STABILIZER <i>#458</i> O.D.	KIND	<i>460</i> FT.	KIND	<i>460</i> FT.	KIND	<i>460</i> FT.
JARS <i>#9028</i>	KIND	<i>569</i> FT.	KIND	<i>569</i> FT.	KIND	<i>569</i> FT.
BUMPER SUB.						
BIT OR CORE BARREL						
TOTAL D.P. & TOOLS		<i>373966</i> FT.		<i>377148</i> FT.		<i>380282</i> FT.
KELLY DOWN (BELOW R.B.)		<i>1500</i> FT.		<i>28</i> FT.		<i>1100</i> FT.
DEPTH OF TOOLS		<i>375466</i> FT.		<i>379948</i> FT.		<i>381382</i> FT.

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>3754</i> FEET	<i>3799</i> FEET	<i>3813</i> FEET
DEPTH START OF TOUR	<i>3754</i> FEET	<i>3754</i> FEET	<i>3799</i> FEET
FOOTAGE DRILLED	<i>—</i> FEET	<i>45</i> FEET	<i>14</i> FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP					<i>56</i>	<i>58</i>	<i>54</i>		<i>54</i>	<i>54</i>		
ROTARY SPEED					<i>50</i>	<i>50</i>	<i>48</i>		<i>50</i>	<i>50</i>		
WEIGHT ON BIT					<i>30</i>	<i>30</i>	<i>30</i>		<i>30</i>	<i>30</i>		
MUD WEIGHT					<i>9.5</i>	<i>9.5</i>	<i>—</i>		<i>9.3</i>	<i>9.3</i>		
VISCOSITY					<i>65</i>	<i>68</i>	<i>—</i>		<i>67</i>	<i>65</i>		
W.L./F.C.					<i>7.0</i>	<i>7.0</i>	<i>—</i>		<i>5.2</i>	<i>5.2</i>		
p.H.					<i>9.5</i>	<i>9.5</i>	<i>—</i>		<i>9.5</i>	<i>9.5</i>		
MUD LEVEL IN TANKS					<i>—</i>	<i>—</i>	<i>—</i>		<i>—</i>	<i>—</i>		

Tipping Reaming.

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	LET HR	BIT CONDITION
<i>13</i>	<i>8 3/4</i>	<i>912035</i>	<i>Secur 588</i>	<i>2.9</i>	<i>9 3/4</i>	<i>3754</i>	<i>3813</i>	<i>59 6.05</i>	<i>N</i>

CORE No.	No.	DST No	FROM	TO	MUD ENGINEER'S REPORT								
					PREFLOW	mins	IHP	ps	IFP	ps	Time	AM	PM
					FROM	mins	FHP	ps	FFP	ps	Mud Wt	Int Gr	10 Min Gr
					TO	mins	ISIP	ps	GTS	ps	Visc	WLF	
					Recovery	mins	FSIP	ps	FTS	ps	A.V.	PH	
					HOURS		RECOVERY				P.V.		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER		<i>P.M. HITTERICK</i>	<i>A. NAST</i>			
DERRICKMAN			<i>J. SCHENK</i>			
HELPER		<i>J. Judson</i>	<i>D. COLLINS</i>			
HELPER		<i>G. ALGER</i>	<i>A. ALEX</i>			
HELPER		<i>J. MacKNACK</i>	<i>J. RANGER</i>			
FIREMAN						
TOOL PUSHER						

TOUR 2
KELZAN A

TOUR 3
KELZAN
DEWICIDE
GEL
Ammonium
NITRATE

MUD + DESIG	TIME	DEPT	TIME
<i>10:00</i>	<i>3765</i>		<i>12</i>
<i>12:00</i>	<i>3778</i>		<i>18</i>
<i>2</i>	<i>3790</i>		<i>18</i>
<i>4</i>	<i>3800</i>		<i>17</i>
<i>6</i>	<i>3810</i>		<i>25</i>
<i>8 PM</i>	<i>3813</i>		<i>20</i>
<i>11:00</i>	<i>3816</i>		

Remitter and
Kind
NEAR BIT *90*
NEAR BIT *95*
BLAKE *48*
BLAKE *48*
Cushman *90*
10 D.C. *5*
30 D.C. *4*

SOBC. W.M. E. Porcupine YT 1-13.

71
JR
0 FT
FT
FT
4 FT
0 FT
5 FT
4 FT
0 FT
9 FT
FT
FT
2 FT
0 FT
2 FT
FEET
FEET
FEET
HOURS
2:00 P.M.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12:00	12:12	Rig Service.
		12:12	12:45	Caliber Bit + Reamers - Blind Rams.
		12:45	2:00	Make up Bit #12 + Run Collars In Hoops
		2:00	4:00	Cut + Slip Dr. lg. Line (Cut 125 - Slip 60).
		4:00	5:30	Run In w/ Bit #12.
		5:30	6:00	Break Circ + Clean 40' F. 11 (Very High)
		6:00	8:00	Reaming 60' To Bottom.
TOUR 2		8:00	8:30	CLEAN TO B.T.M.
KELZAN AL	50#	8:30	1:00	DRILLING
		1:00	1:15	RIG SERVICE + B.C.I.S
		1:15	4:00	DRILLING
TOUR 3				
		4:00	6:30	DRILLING
KELZAN	300	6:30	6:45	RIG SERVICE
DOWICIDE	10#	6:45	8:45	CIRC. SAMPLE, WAIT ON ORDERS
GEL	500	8:45	9:30	BLOW KELLY
Ammonium		9:00	10:15	DUMMY TRIP 10 STDS
NITRATE	50	10:15	12:00	CIRC. CONDITION MUD

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + DESILTER DATA

TIME	DETR	TIME LGAL	FLOW LINE	UNDER FLOW	OVER FLOW	VIS	AU	PV	SP	10" GEL	10" GEL	W.L.	pH	Ca	Cl	Pf	DESILT PRESS	RFINE
10:00	3765	12	9.4	9.7	9.4	68	44	29	29	7	16	7.0	9.5	TR	350	0.1	45	
12:00	3778	18	9.4	10.1	9.2	63							9.5				50	
2	3790	18	9.5	10.1	9.3	67							9.5				50	
4	3800	17	9.5	10.1	9.2	68							9.5				50	
6	3810	25	9.3	9.8	9.4	67							9.5				50	
8 PM	3813	20	9.3	10.1	9.4	65							9.5				50	
11:00	3816		9.4			65	29 1/2	19	21	8	16	7.6	9.5	TR		TR		3.4 @ 78

REAMER AND STABILIZER DATA

KIND	#	HOURS TOOK	CON. HRS
NEAR BIT	9049	- 11 1/4	9 1/2
NEAR BIT	9830	12 1/4	7 99
BLADE	458	12 1/4	33 83
BLADE	451	- 11 1/4	11 1/4
Cushman	9023	12 1/4	19 1/4
10" D.C.	51124	12 1/4	20 1/4
30" D.C.	66452	12 1/4	20 1/4

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

GP

RIG NO 14

FIELD **WILNCAT**

WELL NAME

LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

EAST BROWNIE I-13
 FOR 24 HOURS ENDING 12 MIDNIGHT

MARCH 7 1971

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	DP	NO 33	312541	FT	NO 33	312541	FT	NO	321824	FT
SINGLE	DP	NO. 1	3158	FT	NO 2	6201	FT	NO		FT
X-OVER SUB	OD		154	FT		154	FT		154	FT
OTHER	OD			FT			FT			FT
DRILL COLLARS	7 O.D.	15	46565	FT		46565	FT		46565	FT
DRILL COLLARS	7 1/2 O.D.	NO. 2	3860	FT	NO	3860	FT	NO	3860	FT
REAMER #9830	O.D.	WEAR BIT	534	FT	KIND	534	FT	KIND	534	FT
STABILIZER #.453	O.D.	BLADE	460	FT	KIND	460	FT	KIND	460	FT
WARD STAB #9028	O.D.	CUSHION	569	FT	KIND	569	FT	KIND	569	FT
BUMPER SUB				FT			FT			FT
BIT OR CORE BARREL				FT			FT			FT
TOTAL D.P. & TOOLS			367996	FT		370884	FT		373966	FT
KELLY DOWN (BELOW R.B.)			86	FT		25	FT		1500	FT
DEPTH OF TOOLS			370596	FT		373384	FT		375466	FT

TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR					
	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED			
	3717	3717	0	3733	3717	16	3754	3733	21			
DAY WORK	HOURS			HOURS			HOURS					
	2:0 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	SP.M. P.S.I.	60	60	60	60	58	58	56	56	56	56	56
ROTAARY SPEED	R.P.M.	50-85	50-85	50-85	50-85	55	55	55	55	55	55	55
WEIGHT ON BIT	M. lbs.	10	10	10	10	32	32	32	32	32	32	32
MUD WEIGHT	lb/gal	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
VISCOSITY	sec/qt	56	55	54	60	50	50	55	56	60	60	60
W.L.F.C.	cc 32nd	96	96	96	96	96	96	96	96	96	96	96
p.H.		8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5	8.5
MUD LEVEL IN TANKS	Ft. Ins.											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SEZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
12	8 3/4	23666	H.W. XV	7-10	8	3717	3754	374.6	6-2-0

DRILL - 37' - 8 HRS
 REAM - 60" - 9 1/4 HRS.

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.H.P.	ps	F.P.	Time	AM	PM
FROM		FSI	mins	F.H.P.	ps	F.P.	Mud Wt	TEMP	
TO		V.O.	mins	FSI.P.	ps	STS	Visc		
Recovery		FSI	mins	FSI.P.	ps	FTS	RAY		
HOURS		RECOVERY					P.V.		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	G. SOBERGREN	P.M. KITTEWICK	A. NAST
DERRICKMAN	J. PETERSEN	Ed LANGMUIR	J. SENENK
HELPER	R. ROGERS	J. JORDAN	D. COLLINS
HELPER	L. CHOJNICKI		A. NLEX
HELPER	A. ALEX		J. RANGER
FIREMAN			
TOOL PUSHER			

MUD CHEMICAL Kind
 TOUR 1 GEL
 TOUR 2
 TOUR 3
 GEL
 KELZIAN
 DOWNSIDE B
 CAUSTIC
 MUD CHEMICAL
 TIME DEPTH
 3718
 3730
 DEWICK J.
 WASHING

SORC WH EAST PUMPING YT I-13

M O and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
9 7/1		12 ⁰⁰	12 ¹⁵	RIG SERVICE
UR		12 ¹⁵	8 ⁰⁰	READING RAT HOLE
4 FT	GEL 1400			
4 FT				
4 FT				
5 FT				
0 FT				
4 FT		8 ⁰⁰	10 ⁰⁰	REAM RAT HOLE
0 FT		10 ⁰⁰	11 ⁰⁰	WORK ON HUI PUMP FULL OF RUBBER
9 FT		11 ⁰⁰	11 ³⁰	DRILLING
FT		11 ³⁰	11 ⁴⁵	RIG SERVICE - REPT
FT		11 ⁴⁵	3 ⁰⁰	DRILLING
6 FT	Su 600	3 ⁰⁰	4 ⁰⁰	WORK ON PUMP CLEAN MUD TANK
0 FT				
6 FT				
6 FT				
FEET	GEL 2100	4 ⁰⁰	4 ¹⁵	RIG SERVICE
FEET	KELZAN 100	4 ¹⁵	7 ³⁰	DRILLING
FEET	DOWICIDE "B" 3# 10"	7 ³⁰	8 ⁰⁰	RUN SURVEY @ 3740
FEET	CAUSTIC 100	8 ⁰⁰	9 ⁰⁰	DRILLING
HOURS		9 ⁰⁰	9 ⁴⁵	BLOW KELLY - UNTHAW RAT HOLE
2 00 P.M.		9 ⁴⁵	12 ⁰⁰	HUIST BIT # 11

CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD CHARACTERISTICS

TIME	DEPTH	WT	VISC.	AV	PV	YP	INIT GEL	10 MIN GEL	W.L.	pt	CC	Ca ⁺⁺	SOLIDS
2:00 PM	3718	9.6	54	37	22	23	4	10	8.0	TR	400	20	9
2:00 PM	3730	9.5	55	38	21	22	4	12	8.2	U	400	30	9

DESILTER DATA

DESILTER 2nd 1/2 HOURS
 INVERTED: 1 gel 20 SEC WT 10.1
 DOWN: 9.4

REMOVED AND STABILIZED MUD

Kind	Vb	WTS	STABIL	STABIL
None bit	9049			91 1/4
None bit	9330	17 3/4		86 3/4
BLANK	458	17 3/4		70 3/4
BLANK	451			114 1/4
Control	9028	17 3/4		167 1/4 185
10 W.C.	31124	17 3/4		177 1/4 195
30 W.C.	66452	17 3/4		177 1/4 195

WT # 1/2 INVERTED WTS
 AND 1/4" DOWN

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WILCOAT** WELL NAME **EAST BAYOU PINE I-13** LSD SEC TWP Rpt W
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 6 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS .. D.P.	NO 33	312541	FT	NO 33	312541	FT	NO	312541	FT
SINGLE .. D.P.	NO.		FT	NO 1	3158	FT	NO		FT
X-OVER SUB .. O.D.			FT			FT		154	FT
OTHER .. 7 O.D.	K	46565	FT	K	46565	FT	K	46565	FT
DRILL COLLARS .. 7 1/4 O.D.	Z		FT			FT		3860	FT
DRILL COLLARS .. O.D.	NO.		FT	NO		FT	NO		FT
REAMER NEAR BIT O.D. # 830	KIND		FT	KIND		FT	KIND	534	FT
STABILIZER # ASB O.D.	BLADE		FT	KIND		FT	KIND	460	FT
JARS # 9028	CUSHION		FT	KIND		FT	KIND	569	FT
BUMPER SUB			FT			FT			FT
BIT OR CORE BARREL		7227	FT		7227	FT			FT
TOTAL D.P. & TOOLS		366333	FT		369491	FT		364683	FT
KELLY DOWN (BELOW R.B.)		3167	FT		2309	FT		1200	FT
DEPTH OF TOOLS		369500	FT		31800	FT		365883	FT
TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR		3695	FEET		3718	FEET		3718	FEET
DEPTH START OF TOUR		3667	FEET		3695	FEET		3718	FEET
FOOTAGE DRILLED		28	FEET		23	FEET		0	FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	s.p.m. 40	s.p.m. 40	s.p.m. 40	s.p.m. 40	s.p.m. 40	s.p.m. 40	s.p.m. 40					
ROTARY SPEED	R.P.M. 80	R.P.M. 80	R.P.M. 80	R.P.M. 80								
WEIGHT ON BIT	M.lbs. 15	M.lbs. 15	M.lbs. 15	M.lbs. 15								
MUD WEIGHT	lb/gal 9.5	lb/gal 9.5	lb/gal 9.5	lb/gal 9.5	lb/gal 9.5	lb/gal 9.5	lb/gal 9.5					
VISCOSITY	sec/qt 50	sec/qt 55	sec/qt 60	sec/qt 60	sec/qt 55	sec/qt 60	sec/qt 58					
W.L.F.C.	cc 32nd 8.0	cc 32nd 8.0	cc 32nd 8.0									
p.H.												
MUD LEVEL IN TANKS	Ft. Ins											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	BIT CONDITION
12	8 1/4	23666	H.W. x V	2-9					
11	6 3/16	70A15	Christensen Diamond	None	16 1/2	3658	3717	59	3.6 Good

CORE	No. 1	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT							
						PREFLOW	mins	IHP	ps	Time	AM	PSI	AK
TYPE	CONV												
FROM	3658												
TO	3717												
Recovery	57.3												
HOURS	16 1/2												

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
	Kind	Depth	Reading			
DRILLER	G. SOBERGREN	P. MCKITTERICK	A. NAST			
DERRICKMAN	J. PETERSEN	E. LANGHUR	J. SHENK			
HELPER	R. ROBERTS	F. JURSON	D. COLLINS			
HELPER	L. NYCHOLAT	J. HUCKWAK	A. ALEX			
HELPER	L. CHERKINSKI	G. ALGER	J. RANGER			
FIREMAN						
TOOL PUSHER						

SOB
 M.D. and CHEMIC
 Kind
 TOUR 1
 GEL
 CRACK
 Low Cure
 TOUR 2
 TOUR 3
 Core #1
 Core
 Mud
 Time
 2:00
 3:11
 Biosph
 4:00
 3682
 Reuse
 #
 96
 98
 40
 40

SORC WM EAST PORCUPINE YT I-13

MUD and CHEMICALS ADDED			From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount				
971			12 ⁰⁰	12 ¹⁵	RIG SERVICE ON CONNECTION
UR			12 ¹⁵	8 ⁰⁰	CUTTING CORE #1
1 FT.	GEL	2500			
FT.	CAUSTIC	50			
4 FT.	Downsize 'B'	10			
5 FT.					
0 FT.					
FT.			8 ⁰⁰	2 ¹⁵	CUT CORE #1
4 FT.	TOUR 2		7 ¹⁵	2 ⁰⁵	HOSE
0 FT.			2 ¹⁵	3 ¹⁵	RIG SERVICE, BLOW OUT MUD LINES, TAKE
9 FT.					DOWN KELLY HOSE, JET CLEAN
FT.			3 ¹⁵	4 ⁰⁰	MEASURE OUT
FT.					
3 FT.					CONCRETE BOARD 465.65 465.74
0 FT.					PIPE 3156.99 3156.58
3 FT.	TOUR 3		4 ⁰⁰	4 ¹⁵	RIG SERVICE
FEET			4 ¹⁵	5 ³⁰	FINISH OUT W/ CORE BBL.
FEET			5 ³⁰		BREAK DOWN CORE BBL, LAY
FEET					OUT CORE, BOX SAME.
HOURS			9 ⁰⁰	9 ⁰⁰	LAY DOWN CORE BBL.
12 00 P.M.			9 ⁰⁰	10 ⁰⁰	PICK UP 3 POINT REAMER, 7 1/4" D.C.
			10 ⁰⁰	12 ⁰⁰	BLADE STABILIZER, 7 1/4" D.C., CUSHION STAB.
					RUN IN W/ BIT - XV TO REAM

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Core #1 3653 - 3717 BLACKIE

Cut core in 16 1/2 hours. recovered 5 1/2 ft.
 Average penetration rate: 3.6' / hr
 Average RPM: 80
 Average mud rate: 300 gpm

Core Time

9	13	13	10	10	15	10	11	23	19
15	19	17	19	18	25	18	10	10	18
11	7	15	8	10	10	12	10	17	13
16	22	18	20	24	17	33	27	7	10
7	5	6	12	12	14	16	10	15	13
15	11	13	13	14	23	24	21	25	

Mud Characteristics

Time	Depth	WT	VISC	AV	RV	YP	UNIT GEL	10MIN GEL	W.L. pt	CI	CF	Series	
2:00 PM	3718	9.5	52	29	20	18	4	12	8.0	0.1	400	20	9
8:00 PM	4405	9.5	42	25.5	17	17	2	8	8.4	0.1	400	20	9
4:00 AM	3680	9.5	61	34	22	24	6	18	8.0	0.05	400	30	9

Reamer AND STABILIZER DATA

Kind	#	HRS TOBATT	Core hrs	Kind	#	HRS TOBATT	Core hrs
Reamer bit	9059	—	9 1/2	Cushion	9028	—	16 1/4
Down bit	9830	—	69	10 D.C.	5126	—	7 1/4
Blade	453	—	53	Blade	4452	—	7 1/4
Blade		—	11 1/4				

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WILDCAT** WELL NAME **EAST BUCKWINE I-13** LSD SEC TWP Rge W
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **MARCH 5 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS .. D.P.	NO. 75	236396	FT	NO. 321	303249	FT	NO. 32	103241	FT
SINGLE .. D.P.	NO.		FT	NO.		FT	NO. 2	6250	FT
X-OVER SUB .. O.D.			FT			FT			FT
OTHER .. O.D.			FT			FT			FT
DRILL COLLARS .. 7 O.D.	15	46565	FT		46565	FT		46565	FT
DRILL COLLARS .. O.D.	NO.		FT	NO.		FT	NO.		FT
REAMER .. O.D.	KIND		FT	KIND		FT	KIND		FT
STABILIZER .. O.D.	KIND		FT	KIND		FT	KIND		FT
JARS	KIND		FT	KIND		FT	KIND		FT
BUMPER SUB.	KIND		FT	KIND		FT	KIND		FT
BIT OR CORE BARREL		7227	FT		7227	FT		7227	FT
TOTAL D.P. & TOOLS			FT			FT		363283	FT
KELLY DOWN (BELOW R.B.)			FT			FT		2500	FT
DEPTH OF TOOLS			FT			FT		366783	FT

TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR		3658	FEET		3658	FEET		3667	FEET
DEPTH START OF TOUR		3658	FEET		3658	FEET		3658	FEET
FOOTAGE DRILLED		0	FEET		0	FEET		9	FEET

DAY WORK	HOURS						HOURS					
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	/						/					
ROTARY SPEED	/						/					
WEIGHT ON BIT	/						/					
MUD WEIGHT	/						/					
VISCOSITY	/						/					
W.L./F.C.	/						/					
p.H.	/						/					
MUD LEVEL IN TANKS	/						/					

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1-32	TOTAL HOURS	FROM	TO	PS	FT	BIT CONDITION
11	6 3/16	70A15	CURSOR ENDED DARTING	NONE	2 1/4	3658	3667	9	4	IN

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	FHP	ps	EEP	ps	Time	AM
FROM		ISI	mins	FHP	ps	EEP	ps	Mud Wt	Int. Gas
TO		VO	mins	ISIP	ps	GTS	ps	V.S.	WLF
Recovery		FSI	mins	FSIP	ps	ETS	ps	AV	PH
HOURS		RECOVERY			ps	ETS	ps	PV	SPH

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	GH SOMERGREEN	P. M. K...	A. NAST	Kind	Depth	Remarks
DERRICKMAN	J. PEDERSEN	E. LING...	J. SHENK			
HELPER	R. ROGERS	F. JUDSON	J. COLLINS			
HELPER	L. NYCHLAT	J. MAC...	A. ALEX			
HELPER	L. CHERNIEWSKI	A. HUGG...	J. RANGER			
FIREMAN						
TOOL PUSHER	D. ...					

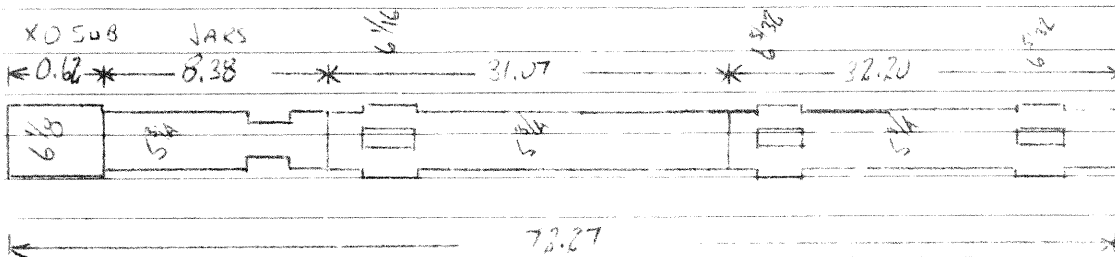
and CHEMICAL Kind
 TOUR 1
 TOUR 2
 TOUR 3
 GEN
 KELZAN
 CORE BAR
 CORE BIT
 JARS
 KEMERS
 DESICER

SOLIC WM EAST PORCUPINE YT I-13

1971
 DUR
 1 FT
 0 FT
 FT
 FT
 5 FT
 FT
 FT
 FT
 7 FT
 3 FT
 0 FT
 3 FT
 FEET
 FEET
 FEET
 HOURS
 12:00 PM
 40
 550
 80
 8
 9.1
 60
 9.0
 ON
 PORT
 10
 11
 Reading

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	1 ⁰⁰	First breaking down test 1000 ft. mark down same
		1 ⁰⁰	3 ⁰⁰	Make up core barrel and make up same
		3 ⁰⁰	6 ³⁰	Run in to 10 stands from bottom (5000 ft) Full up frozen mud (1460).
		6 ³⁰	8 ⁰⁰	Return to mud line
TOUR 2		8 ⁰⁰	1 ⁴⁵	Wait on weller to return mud line. Well hole in line, pressure up on line, pull piece out of line. Cut 300 ft. section out of mud line and put well remaining.
		1 ⁴⁵	2 ⁰⁰	Rig service check P.D.'s
		2 ⁰⁰	4 ⁰⁰	Run in to core. Thaw Kelly. (1 4.3)
TOUR 3		4 ⁰⁰	5 ¹⁵	UNTHAW KELLY HOSE
		5 ¹⁵	5 ³⁰	RIG SERVICE
GEL	1600	5 ³⁰	8 ¹⁵	CLEAN OUT TO BTM. 45 FT.
KELZAN	100	8 ¹⁵	9 ¹⁵	CIRC. PRIOR TO CUTTING CORE
		9 ¹⁵	9 ⁴⁵	CUTTING CORE # 1
		9 ⁴⁵	10 ¹⁵	REPLACE O-RING IN GOOSE NECK
		10 ¹⁵	12 ⁰⁰	CUTTING CORE # 1

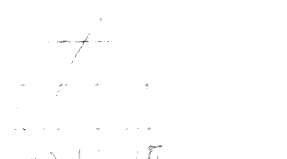
CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES



- CORE BARREL CHRISTENSEN # 17C (5 3/4" STABILIZED TO 6 3/16")
- CORE BIT CHRISTENSEN # 7PHIS (TYPE D C-20, 6 3/16" x 2 1/2")
- JAKS BRUSH ROSS 5 3/4" x 2"

LEATHERS AND STABILIZERS
 No hours today

DESILTER
 how can we get to compare down with circulating


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *C.P. Dwy*

RIG NO *14*

FIELD *Wildcat*

WELL NAME *E. Porcupine-13* LSD

SEC TWP

Rue W

S.D. B.C.
M and CHEMICAL
Kind

- DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT *March 4 1971*

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR					
STANDS	D.P.	NO. <i>33</i>	<i>3</i>	<i>16742</i>	FT	NO. <i>33</i>	<i>3</i>	<i>16742</i>	FT	NO. <i>33</i>	<i>3</i>	<i>16742</i>	FT
SINGLE	D.P.	NO.			FT	NO			FT	NO			FT
X-OVER SUB	O.D.				FT				FT				FT
OTHER	O.D.				FT				FT				FT
DRILL COLLARS	O.D.	<i>7</i>	<i>15</i>	<i>46565</i>	FT	<i>15</i>	<i>46565</i>		FT		<i>46565</i>		FT
DRILL COLLARS	O.D.	<i>7 3/4</i>	NO. <i>2</i>	<i>3860</i>	FT	NO			FT	NO			FT
REAMER # <i>9049</i>	O.D.		KIND	<i>5438</i>	FT	KIND			FT	KIND			FT
STABILIZER # <i>451</i>	O.D.		KIND	<i>460</i>	FT	KIND <i>Tools</i>	<i>8212</i>		FT	KIND	<i>8212</i>		FT
JARS # <i>9028</i>	O.D.		KIND	<i>569</i>	FT	KIND			FT	KIND			FT
BUMPER SUB			KIND		FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL D.P. & TOOLS				<i>364329</i>	FT				FT		<i>371519</i>		FT
KELLY DOWN (BELOW R.B.)				<i>1500</i>	FT				FT				FT
DEPTH OF TOOLS				<i>365829</i>	FT				FT				FT

TOOL # *601-4600*
TOOL #
TOOL #

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>3658</i> FEET	<i>3658</i> FEET	<i>3658</i> FEET
DEPTH START OF TOUR	<i>3658</i> FEET	<i>3658</i> FEET	<i>3658</i> FEET
FOOTAGE DRILLED	<i>0</i> FEET	<i>0</i> FEET	<i>0</i> FEET

DAY WORK	HOURS						HOURS					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												
ROTARY SPEED	<i>Give Hole -</i>											
WEIGHT ON BIT	<i>Cond Mud For Drill</i>											
MUD WEIGHT	<i>Steer Test #1</i>											
VISCOSITY												
W.L.F.C.												
p.H.												
MUD LEVEL IN TANKS												

DST #
Law T
16.62 ft
Reason
Opened at
Opened at
15.62 ft
#
Rate
Reason
Force
Pressure

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	PER HOUR	BIT CONDITION
<i>10</i>	<i>B 3/4</i>	<i>335443</i>	<i>SECURITY SBB</i>	<i>3-9 5/16</i>		<i>2840</i>	<i>3653</i>	<i>818</i>	<i>14.5</i>	<i>A-2-1</i>

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT			
TYPE		PREFLOW	mins	FHP	PS	FEF	PS	Time <i>3:00</i> AM <i>0.17</i>
FROM		ISI	mins	FHP	PS	FEF	PS	Mud Wt <i>9.6</i> <i>5/19</i>
TO		V.O	mins	ISI P	PS	GTS	PS	Wt <i>6.4</i> <i>9.2</i>
Recovery		F.S.I	mins	F.S.I P	PS	F.T.S	PS	AV <i>38</i> <i>100</i>
HOURS		RECOVERY			PS		PS	PV <i>30</i> <i>10</i>

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>G.H. Sodergren</i>	<i>P. McKittrick</i>	<i>A. NAST</i>
DERRICKMAN	<i>J. Pedersen</i>	<i>Ed LANGMUIR</i>	<i>J. SCHENK</i>
HELPER	<i>R. Rogers</i>	<i>GOFF</i>	<i>D. COLLINS</i>
HELPER	<i>L. Nycholat</i>	<i>J. Judd</i>	<i>H. HUX</i>
HELPER	<i>L. Chernyevski</i>	<i>J. MACKNAK</i>	<i>J. HANGER</i>
FIREMAN			
TOOL PUSHER	<i>Dobsonkamp</i>		

DEVIATION RECORD
Kind Depth Reading
20/400

S.O.B.C. - W.M. E. Porcupine Y.T 1-13.

1971
 DUR
 12 FT.
 FT.
 FT.
 FT.
 5 FT.
 FT.
 FT.
 2 FT.
 FT.
 FT.
 9 FT.
 FT.
 FT.
 FEET
 FEET
 FEET
 HOURS
 12:00 P.M.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	12 ¹⁵	Rig Service.
Gal-4600*		12 ¹⁵	4 ⁰⁰	Circ Hole Cond Mud - Drill Stem Test #1.
		4 ⁰⁰	4 ⁴⁵	Circ. Hole To Test.
		4 ⁴⁵	7 ⁰⁰	Hoisting To Run Drill Stem Test.
		7 ⁰⁰		Break Down Reamers + Stub. 7 3/4" Collars Lay Down Same.
TOUR 2		8 ⁰⁰	4 ⁰⁰	Pick up PARKER REAR MARKS 4/20 Run 101 Skovv
TOUR 3		4 ⁰⁰	12 ⁰⁰	Testing. Pulled loose at 8:50 PM. Turned at 10:00 PM. Tore down tool to charts, then laid down.

CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DST #1 3650 - 3653 BLACKIE Note: Hole not circulated after 4:45 AM

Ran T.G. EISLAND TESTING TOOL ON 465' 7" x 2 7/8" DIAM COLARS AND 4 1/2" - 16.60 # K.H. DRILL PIPE. FOUND BOTTOM 25' HIGH. HEAVED UP, OPENED TOOL FOR PEELOW SWIRL TO BOTTOM (LOST 12-15 HOURS AND WHILE SKIPPING). VALVE WAS OPENED AT 4:55 PM FOR 85 MIN, INITIALLY SHUT IN AT 5:03 FOR 30 MIN, OPENED AT 6:33 PM FOR 65 MIN AND SHUT IN FOR FINAL SHUT IN PRESSURE AT 6:33 PM FOR 75 MIN. TOOL WAS PULLED LOOSE AND FROD WITH 20,000 # OIL STROKE HEIGHT AT 6:53 PM March 4.
 RECEIVED GOOD AIR BLOW ON PERFUM, VERY FINE AIR BLOW ON FROD PERIOD 10:00 AM TO 10:15 AM ON FINAL SHUT IN.
 Porcupine 465 WATER AND: (TOTAL 9.1 CE-915 ppm.)

Pressures:	IRP 1779 psi	ISIP 567	PEELOW 283
	FAP 1779	FSIP 405	IFP 283
			FAP 270
			FIELD READINGS FROM OUTSIDE RECORDER # 3465 @ 3627'

Comparison of charts indicated no logging.

Test mechanically satisfactory.

OWNER'S AND SUPERVISOR'S: [Signature] WORKS TODAY

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Dalg.*

RIG NO *14*

SOBC

FIELD *Wildcat* WELL NAME *E Porcupine-1-13* LSD

SEC TWP Rge W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *March 3 1971*

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR				
STANDS .. <i>4 1/2</i> D.P.	NO <i>32</i>	<i>303248</i>	FT	NO.				FT	NO <i>33</i>	<i>316742</i>	FT		
SINGLE .. D.P.	NO <i>1</i>	<i>3175</i>	FT	NO.				FT	NO		FT		
X-OVER SUB .. O.D.			FT					FT			FT		
OTHER .. O.D.			FT			<i>465</i>	<i>65</i>	FT			FT		
DRILL COLLARS .. <i>7</i> O.D.	<i>15</i>	<i>46565</i>	FT			<i>3860</i>		FT		<i>46565</i>	FT		
DRILL COLLARS .. <i>7 1/4</i> O.D.	NO <i>2</i>	<i>3860</i>	FT	NO		<i>5838</i>		FT	NO	<i>3860</i>	FT		
REAMER .. <i>9049</i> O.D.	KIND <i>Cone</i>	<i>538</i>	FT	KIND		<i>460</i>		FT	KIND	<i>538</i>	FT		
STABILIZER .. <i>451</i> O.D.	KIND <i>Blade</i>	<i>460</i>	FT	KIND		<i>569</i>		FT	KIND	<i>460</i>	FT		
JARS .. <i>9028</i>	KIND <i>Cushion</i>	<i>569</i>	FT	KIND				FT	KIND	<i>569</i>	FT		
BUMPER SUB.			FT	KIND				FT	KIND		FT		
BIT OR CORE BARREL			FT					FT			FT		
TOTAL D.P. & TOOLS		<i>358315</i>	FT			<i>3645</i>		FT		<i>364529</i>	FT		
KELLY DOWN (BELOW R.B.)		<i>1700</i>	FT			<i>13</i>		FT		<i>1700</i>	FT		
DEPTH OF TOOLS		<i>360000</i>	FT			<i>3658</i>		FT		<i>365829</i>	FT		

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
DEPTH END OF TOUR		<i>3600</i>	FEET			<i>3658</i>	FEET			<i>3658</i>	FEET		
DEPTH START OF TOUR		<i>3506</i>	FEET			<i>3600</i>	FEET			<i>3658</i>	FEET		
FOOTAGE DRILLED		<i>94</i>	FEET			<i>58</i>	FEET			<i>000</i>	FEET		

DAY WORK	HOURS											
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	<i>52</i>	✓	✓	✓	<i>52</i>	✓	<i>52</i>	✓	✓	✓	✓	✓
ROTARY SPEED	<i>48</i>	✓	✓	✓	<i>48</i>	✓	<i>48</i>	✓				
WEIGHT ON BIT	<i>20</i>	✓	✓	✓	<i>20</i>	✓	<i>30</i>	✓				
MUD WEIGHT	<i>9.5</i>	✓	✓	✓	<i>9.6</i>	✓	<i>9.7</i>	✓	<i>9.5</i>	<i>9.6</i>		
VISCOSITY	<i>38</i>	✓	✓	✓	<i>36</i>	✓	<i>35</i>	✓	<i>37</i>	<i>37</i>		
W.L.F.C.		✓	✓	✓		✓		✓	<i>10.2</i>			
p.H.	<i>9.5</i>	✓	✓	✓	<i>9.0</i>	✓	<i>9.0</i>	✓		<i>10</i>		
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT. HR.	BIT CONDITION
<i>10</i>	<i>8 3/4</i>	<i>335443</i>	<i>588</i>	<i>3-9</i>	<i>55 1/4</i>	<i>2540</i>	<i>3653</i>	<i>818</i>	<i>IN HOLE</i>

CORE No.	No.	TEST No.	FRG.	TO	MUD ENGINEER'S REPORT									
					PREFLOW	mins	IHP	ps	IFP	ps	Time	AM	PM	Aik
					FROM	mins	FHP	ps	FFP	ps	Mud Wt	Int. Gr.	10 Min. Gel	
					TO	mins	ISIP	ps	GTS	ps	Visc	W.L.F.C.		
					Recovery	mins	FSIP	ps	FTS	ps	A.V.	p.H.		
					HOURS		RECOVERY				P.V.	Sludg		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
DRILLER	<i>G.H. Sodergran.</i>	<i>P. McKittrick</i>	<i>A. NAST</i>	Kind	Depth	Reading
DERRICKMAN	<i>J. Pedersen.</i>	<i>Ed. LANGMUIR</i>	<i>J. SCHENK</i>	WL	<i>3550</i>	<i>1 1/2' +</i>
HELPER	<i>R. Rogers.</i>	<i>D.M. Collins</i>	<i>D. COLLINS</i>	WL	<i>3610</i>	<i>1' 8"</i>
HELPER	<i>L. Nicholatz.</i>	<i>J. MACKNAK</i>	<i>A. ALEX</i>			
HELPER	<i>L. Chernipevski.</i>	<i>J. JUDSON</i>	<i>J. RANGER</i>			
		<i>G. ALGER</i>				

and CHEMICAL

Kind

TOUR 2
KELZAN
Coil
CAUSTIC
Downside

TOUR 3
KELZAN

Time	Depth	Time
<i>8:30 AM</i>		<i>26</i>
<i>4:00</i>		<i>26</i>
<i>6</i>		<i>26</i>
<i>8</i>	<i>3600</i>	<i>26</i>
<i>9:30</i>		
<i>10</i>	<i>3625</i>	<i>27</i>
<i>12:00</i>	<i>3645</i>	<i>28</i>
<i>2</i>	<i>3655</i>	<i>27</i>
<i>8</i>	<i>3658</i>	<i>40</i>

Kind	#
<i>NEAR BIT</i>	<i>9049</i>
<i>NEAR BIT</i>	<i>983</i>
<i>BLANK</i>	<i>458</i>
<i>BLANK</i>	<i>451</i>
<i>CUSHION</i>	<i>902</i>
<i>10" D.C.</i>	<i>511</i>
<i>30" D.C.</i>	<i>64</i>

SOBC - W.M. E. Porcupine Y T 1-13

MUD and CHEMICALS ADDED			From		To		OTHER HOURLY OPERATING DETAIL WORK DONE	
OUR	Kind	Amount						
12	TOUR 1		12 ⁰⁰	12 ¹⁵				Rig Service.
			12 ¹⁵	3 ⁰⁰				D-19.
			3 ⁰⁰	3 ³⁰				Work Tight Hole
			3 ³⁰	4 ⁰⁰				Survey
			4 ⁰⁰	7 ⁰⁰				D-19.
5	TOUR 2		8 ⁰⁰	10 ⁰⁰				DRILLING
6	KELZAN	200	10 ⁰⁰	10 ³⁰				WORKPIPE + SURVEY
7	GOL	500	10 ³⁰	10 ⁴⁵				RIG SERVICE
8	CAUSTIC	50	10 ⁴⁵	1 ¹⁵				DRILLING
9	DISINFECTANT	10	1 ¹⁵	4 ⁰⁰				CIRC UP SAMPLES FOR GEO + CIRC
9	TOUR 3		4 ⁰⁰	4 ¹⁵				RIG SERVICE
			4 ¹⁵	8 ⁰⁰				CIRC. CONDITION MUD TO TEST
	KELZAN	100	8 ⁰⁰	11 ³⁰				DUMMY TRIP 15 STDS.
			11 ³⁰	12 ⁰⁰				CLEANING TO ATM. 12 ⁰⁰
								STAYED ON BANK 30 MIN.
								PRIDE TO RUNNING IN

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + DESILTER DATA

TIME	DEPTH	TIME 1 GEL	FLUID LOSS	UNOED FLUID	OVER FLOW	WISC	AU	UV	YP	100 GEL	10 MIN GEL	W.L.	pH	Ca ⁺⁺	Cl ⁻	SP	DESILTER
8:30 AM		26	9.5	10.2	9.5	33											42
9:00		26	9.5	10.1	9.4	33											42
6		26	9.4	10.1	9.4	38											42
8	3600	26	9.6	10.1	9.4	38											42
9:30			9.7			36	14	9	10	2	4	11.4	9.0	30	450	0.05	
10	3625	27	9.6	10.4	9.5	35											45
12:00 PM	3645	28	9.7	10.3	9.5	36											45
2	3655	27	9.7	10.2	9.4	35											45
8	3658	40	9.6	10.1	9.5	37											45

Reading + Standard Used

Kind	#	HRS TODAY	CUM. HRS
NBAR BIT	9049	11 1/4	91 1/2
NOVA BIT	9830	—	69
BLADE	458	—	53
BLADE	451	11 1/4	114 1/4
CASHIN	9028	11 1/2	167 1/4
10' U.C.	51124	11 1/2	177 1/4
30' U.C.	66452	11 1/4	177 1/4

MADE SHORT TRIP AT 3658 AFTER CONCERNING MUD.
 HOLE VERY TIGHT. 1ST 4 AND 9TH STAND
 CAME BACK IN TO BUILD VISCOSITY

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO *14*

FIELD *Walden* WELL NAME *St. Anthony 1-13SD* SEC TWP Rge W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *Mar 2/91* 19

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR					
STANDS	D.P.	NO 29	27	49	61	FT	NO 31	29	38	64	FT		
SINGLE	D.P.	NO				FT	NO 1			31	71	FT	
X-OVER SUB	O.D.					FT						FT	
OTHER	O.D.					FT						FT	
DRILL COLLARS	7" O.D.	15'	4	65	65	FT		4	65	65	FT		
DRILL COLLARS	7 3/4" O.D.	NO			38	60	FT	NO			38	60	FT
REAMER # 9049	O.D.	KIND <i>Chert</i>			5	38	FT	KIND			5	38	FT
STABILIZER # 1161	O.D.	KIND <i>Blade</i>			4	60	FT	KIND			4	60	FT
STAB # 9028	O.D.	KIND <i>Cushion</i>			5	69	FT	KIND			5	69	FT
BUMPER SUB						FT						FT	
BIT OR CORE BARREL						FT						FT	
TOTAL D.P. & TOOLS			3	2	69	53	FT		3	2	69	53	FT
KELLY DOWN (BELOW R.B.)					1	108	FT				1	108	FT
DEPTH OF TOOLS			3	2	80	58	FT		3	2	80	58	FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	3280 FEET	3416 FEET	3506 FEET
DEPTH START OF TOUR	3208 FEET	3280 FEET	3416 FEET
FOOTAGE DRILLED	72 FEET	136 FEET	90 FEET

DAY WORK	HOURS						HOURS					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:30 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	s.p.m. 53 p.s.i. 1900	53 1700	53 1900	53 1700	52 1650	52 1650	52 1650	52 1650	53 1650	53 1650	53 1650	53 1650
ROTARY SPEED	R.P.M. 48	48	48	48	50	50	50	Circ	48	48	48	48
WEIGHT ON BIT	M lbs. 30	30	30	30	30	30	Circ	30	30	25	30	30
MUD WEIGHT	lb/gal 9.4	9.4	9.4	9.4	9.5	9.5	9.5	9.5	9.5	9.5	9.5	9.5
VISCOSITY	sec. qt. 37	40	39	40	36	36	38	39	38	38	39	39
W.L./F.C.	c.c./32nd				412	-	-	412				
p.H.												
MUD LEVEL IN TANKS	Ft.-Ins											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	DEPTH	BIT CONDITION
10	8 3/4	335443	SECURITY	588 3-9	44	2540	506	606 15 3/4	Drilling

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT									
					PREFLOW	mins	F.H.P.	DS	F.P.	DS	Time	AM	PM	AK
					FROM	mins	F.H.P.	DS	F.P.P.	DS	Mud Wt	10 Min	30 Min	60 Min
					TO	mins	F.S.P.	DS	F.T.S.	DS	Visc	W.L.F.C.		
					Recovery	mins	F.S.P.	DS	F.T.S.	DS	AV			
					HOURS		RECOVERY							

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION REPORT		
DRILLER	<i>FRASER</i>	<i>G.H. Sadery</i>	<i>J. Pedersen</i>	Kind	Depth	Reading
DERRICKMAN	<i>FRASER</i>	<i>J. Pedersen</i>		WL	3236	1"
HELPER	<i>VALQUIETTE</i>	<i>R. Rogers</i>	<i>D. Collins</i>	WL	3470	1 1/2"
HELPER	<i>FRASER</i>	<i>L. Mycalat</i>	<i>J. Mockner</i>	WL	3490	1 1/4"
HELPER	<i>COX</i>	<i>L. Charniponki</i>				
FIREMAN						
TOOL PUSHER						

50BC
7" water
Caustic Plaster Down side
TC - 2
TC - 3
TC - 4
TC - 5
TC - 6
TC - 7
TC - 8
TC - 9
TC - 10
TC - 11
TC - 12
TC - 13
TC - 14
TC - 15
TC - 16
TC - 17
TC - 18
TC - 19
TC - 20
TC - 21
TC - 22
TC - 23
TC - 24
TC - 25
TC - 26
TC - 27
TC - 28
TC - 29
TC - 30
TC - 31
TC - 32
TC - 33
TC - 34
TC - 35
TC - 36
TC - 37
TC - 38
TC - 39
TC - 40
TC - 41
TC - 42
TC - 43
TC - 44
TC - 45
TC - 46
TC - 47
TC - 48
TC - 49
TC - 50

SOBC W.M. E. POCYAN Y.T. 1-13

M.D. and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1				
7" water		12:00	12:15	Drilling
		12:15	1:00	C.M.C. & cement pipe for Run Trip
		1:00	2:15	Hoist 10 STANDS & Run in Hole
		2:15	2:30	Chase 10FT to ASTM
		2:30	5:45	Drilling
		5:45	5:55	R.O. SERVICE & SURVEY @ 3236 1"
		5:55	8:00	Drilling
TOUR 2				
Caustic	50#	8:00	9:00	Drilling
Plaster	100#	9:00	9:20	Rig Service B.O.P.'s Rig Savers Kelly Cock Crown Stopper.
Dewicide	100#	9:20	3:15	Drilling
		3:15	4:00	Cive Sample 3416
TOUR 3				
	400	5:00		Drilling
	5:00	5:30		Rig Service & Survey
	5:30	11:00		Drilling
	11:00	11:30		SURVEY
	11:30	12:00		Drilling
KENZAN	100#			

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD AND DESILTER DATA																		DESILTER PRESS
TIME	DEPTH	TIME GAL	FLOW LINE	UNDER FLOW	OVER FLOW	VISC	AU	RV	YP	INI GEL	10 MIN GEL	WL	pH	Ca ⁺	CE	IF	RF	
9:30 AM													9.0					
39	4	3232	28	9.4+	10.2	9.4-	39						9.0					45
	6	3249	29	9.4+	10.1	9.3+	36						7.0					45
	8	3280	27	9.4	10.1	9.3	36						8.5					42
	10		27	9.4	10.2	9.4	37	13	8	10	1	3	11.0	9.0	40	500	0	42
	12 N		27	9.4	10.2	9.4	38						10.5					42
7:00	3460			9.5			15	9	12	2	5	11.4	7.5	40	500	0.05		
12 M	3506	27	9.5	10.2	9.4	39							8.5					42

STABILIZER DATA			
Kind	#	Wts Tons	Wt. Hrs
WATER	9049	19	80 1/4
WATER	9830	---	69
BENTON	458	---	53
BENTON	451	19	103
CUSTOMER	9028	19	156
10 D.C.	51124	19	166
30 D.C.	66452	19	166

MADE SURVEY RUN AT 3210 (10 STANDS)
 NO MORE OVER 300 #
 10' FILL ON BOTTOM

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO *14*

FIELD *Wild Cat* WELL NAME *L. Polymers 1-13* LSD

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *MAR 1 1971*

1971

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR				
STANDS	D.P.	NO. <i>26</i>	<i>24635</i>	<i>1</i>	FT.	NO.		FT.	NO. <i>28</i>	<i>26533</i>	<i>7</i>	FT.
SINGLE	D.P.	NO.			FT.	NO.		FT.	NO.			FT.
X-OVER SUB	O.D.				FT.			FT.				FT.
OTHER	O.D.				FT.			FT.				FT.
DRILL COLLARS	<i>7"</i> O.D.	<i>15</i>	<i>46565</i>		FT.		<i>46565</i>	FT.		<i>46565</i>		FT.
DRILL COLLARS	<i>7 3/4"</i> O.D.	NO. <i>2</i>	<i>3860</i>		FT.	NO.	<i>3860</i>	FT.	NO.	<i>3860</i>		FT.
REAMER # <i>9049</i>	O.D.	<i>MET</i>	<i>538</i>		FT.	KIND	<i>538</i>	FT.	KIND	<i>538</i>		FT.
STABILIZER # <i>451</i>	O.D.	<i>BLADE</i>	<i>460</i>		FT.	KIND	<i>460</i>	FT.	KIND	<i>460</i>		FT.
STAB # <i>9028</i>	O.D.	<i>Custom</i>	<i>569</i>		FT.	KIND	<i>569</i>	FT.	KIND	<i>569</i>		FT.
BUMPER SUB					FT.			FT.				FT.
BIT OR CORE BARREL					FT.		<i>307753</i>	FT.		<i>317329</i>		FT.
TOTAL D.P. & TOOLS			<i>298344</i>		FT.		<i>307591</i>	FT.				FT.
KELLY DOWN (BELOW R.B.)			<i>2705</i>		FT.		<i>1647</i>	FT.		<i>3471</i>		FT.
DEPTH OF TOOLS			<i>301049</i>		FT.		<i>309400</i>	FT.		<i>320800</i>		FT.

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	<i>3010</i> FEET	<i>3094</i> FEET	<i>3208</i> FEET
DEPTH START OF TOUR	<i>2910</i> FEET	<i>3010</i> FEET	<i>3094</i> FEET
FOOTAGE DRILLED	<i>100</i> FEET	<i>84</i> FEET	<i>114</i> FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	<i>52 1900</i>	<i>52 1700</i>	<i>1000</i>	<i>1000</i>	<i>53 1650</i>	<i>53 1650</i>	<i>53 1600</i>	<i>53 1650</i>	<i>53 1650</i>	<i>53 1650</i>	<i>53 1650</i>	<i>53 1650</i>
ROTARY SPEED	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>	<i>48</i>
WEIGHT ON BIT	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>40</i>	<i>30</i>	<i>30</i>	<i>40</i>	<i>30</i>
MUD WEIGHT	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.5</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>	<i>9.4</i>
VISCOSITY	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>35</i>	<i>37</i>	<i>37</i>	<i>42</i>	<i>42</i>	<i>36</i>	<i>36</i>	
W.L.F.C.								<i>8.2</i>	<i>8.2</i>			
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 3"	TOTAL HOURS	FROM	TO	FT. MIN.	BIT LENGTH
<i>10</i>	<i>8 3/4</i>	<i>335443</i>	<i>Security</i>	<i>588 3-9</i>	<i>75</i>	<i>2940</i>	<i>3208</i>	<i>363</i>	<i>14.7</i>

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT
TYPE		PREFLOW	mins. F.H.P.	PS. F.F.	PS. F.H.P.
FROM		ISI	mins. F.H.P.	PS. F.F.	PS. Mud Wt.
TO		VO	mins. F.S.P.	PS. W.T.S.	PS. W.T.S.
Recovery		FSI	mins. F.S.P.	PS. F.T.S.	PS. F.T.S.
HOURS		RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>FRASER</i>	<i>G. H. Sodergren</i>	<i>J. Peterson</i>
DERRICKMAN	<i>FRASER</i>	<i>J. Pedersen</i>	<i>G. FRASER</i>
HELPER	<i>VALQUETTE</i>	<i>R. Rogers</i>	<i>D. Collins</i>
HELPER	<i>RINE</i>	<i>L. Nycolat</i>	<i>L. NYCOLAT</i>
HELPER	<i>COX</i>	<i>L. Chernipek</i>	<i>K. W. MUCKNAK</i>
FIREMAN			
TOOL PUSHER	<i>D. Pigeon</i>		

208C
GET
KILZAN
PLASTER
12" of WATER
12" of water
Natyan 30k
One 4 aka
Plaster 2 aka
20' inside
Custom 2 st
MUD + DESIG

TIME	DEPTH	TIME
<i>1:00 AM</i>	<i>2930</i>	<i>28</i>
<i>3</i>	<i>2956</i>	<i>28</i>
<i>5</i>	<i>2980</i>	<i>28</i>
<i>12:00 PM</i>	<i>3042</i>	<i>26</i>
<i>2</i>	<i>3056</i>	<i>27</i>
<i>6</i>	<i>3130</i>	<i>27</i>
<i>8</i>	<i>3176</i>	<i>26</i>
<i>10</i>	<i>3176</i>	<i>27</i>
<i>12:00 PM</i>	<i>3208</i>	<i>27</i>

RIMMER

Kind	#
<i>NEAR BIT</i>	<i>76</i>
<i>NEAR BIT</i>	<i>78</i>
<i>BLADE</i>	<i>4</i>
<i>BLADE</i>	<i>4</i>
<i>CUSTOM</i>	<i>90</i>
<i>10 D.C.</i>	<i>511</i>
<i>30 U.C.</i>	<i>66</i>

JOBC W.M. F. PORCUPINE TT 1-13

1971
DUR
7 FT
FT
FT
FT
5 FT
0 FT
8 FT
0 FT
9 FT
FT
9 FT
FT
1 FT
0 FT
R
FEET
FEET
FEET
HOURS
12:00 P.M.
53
16.50
48
30

MATERIALS AND CHEMICALS ADDED		Fr	To
Kind	Amount		
TOUR 1		12 ⁰⁰	12 ⁴⁵
		12 ⁴⁵	1 ⁰⁰
GET #	4 ⁰⁰	1 ⁰⁰	1 ¹⁵
RELZANE	1 ⁰⁰	1 ¹⁵	4 ⁴⁵
PLASTER #	1 ⁰⁰	4 ⁴⁵	6 ⁰⁰
12" of WATER		6 ⁰⁰	8 ⁰⁰
TOUR 2		8 ⁰⁰	8 ⁴⁵
		8 ⁴⁵	9 ¹²
Relzane	150 ⁰⁰	9 ¹²	10 ⁰⁰
Plaster	150 ⁰⁰	10 ⁰⁰	1 ⁴⁵
12" inside B	10 ⁰⁰	1 ⁴⁵	2 ¹²
		2 ¹²	4 ⁰⁰
TOUR 3		4 ⁰⁰	7 ⁴⁵
		7 ⁴⁵	8 ⁰⁰
12" of water		8 ⁰⁰	12 ⁰⁰
Nalgon 3 aka	150 ⁰⁰		
Gel 4 aka	150 ⁰⁰		
Plaster 2 aka	100 ⁰⁰		
Downside	10 ⁰⁰		
Caustic 2 aka	100 ⁰⁰		

OTHER HOURLY OPERATING DETAIL
WORK DONE

Drilling
Survey @ 2920
Rig Service
Drilling
Work over 1 Pump
Drilling w/ 2 Pump

Drilling
Rig Service, Ch. B.O.P.'s Rig Savers Kelly Cock
Brake Pins.
Work Tight Con.
Drilling
Survey @ 3045
Drilling
Drilling
Rig Service w/ ROPS
DRILLING

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

WLD + DESILTER DATA

TIME	DEPTH	TIME OVER CUT	FLOW LINE	UNDER FLOW	DJBL FLOW	VISC	AU	PV	YP	INIT GEL	10 MIN GEL	W.L.	pH	Ca ⁺⁺	CE	R _f	R _f	DESILTER LOSS
1:00 AM	2930	28	9.6	10.1	9.4	35												
3	2956	28	9.6	10.3	9.4	35												
5	2980	28	9.6	10.2	9.4	35				1	2		9.5					
12:00 PM	3042	26	9.5	10.2	9.4	37												
2	3056	27	9.5	10.2	9.4	42												
6	3130	27	9.4	10.2	9.4	40	15	9	12	1	4	11.0	8.0	30	400	0		42
8		26	9.4	10.2	9.4	36												
10	3176	27	9.4	10.4	9.4	37												
12:00 PM	3208	27	9.4	10.2	9.4	40												

REAMER + STABILIZER DATA

KIND	#	HRS TODAY	CUM. HRS
NEAR BIT	9049	21	61 1/4
NEAR BIT	9830	21	69
7/8 BLADE	458	21	53
1/2 BLADE	451	21	84
CUSHION	9028	21	137
10 U.C.	51124	21	147
30 U.C.	66452	21	147

BEGAN PUMPING PLASTER TO ATTEMPT TO RAISE YP AND HOLD CLEARING AHEAD.

MARKED IMPROVEMENT

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *H.P. Drilling* PHS NO 14

FIELD *L110 Cat* WELL NAME *Polymaris 1-13* LSD SEC TWP Rpt W
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *Feb 28/91* 19

SBC
 CHEMICAL
 Kind

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	D.P.	NO 24	227492	FT	NO 24	227492	FT	NO 25	236896	FT
SINGLE	D.P.	NO 1	3175	FT	NO 1	3175	FT	NO		FT
X-OVER SUB	O.D.			FT			FT			FT
OTHER	O.D.			FT			FT			FT
DRILL COLLARS	7" O.D.	15	46565	FT		46565	FT		46565	FT
DRILL COLLARS	2-7/8" O.D.	NO	3860	FT	NO	3860	FT	NO	3560	FT
REAMER	#9830 O.D.	KIND	534	FT	KIND	534	FT	#9830	538	FT
STABILIZER	#451 O.D.	KIND	460	FT	KIND	460	FT	KIND	460	FT
STABILIZER	#9028 O.D.	KIND	569	FT	KIND	569	FT	KIND	569	FT
BUMPER SUB				FT			FT			FT
BIT OR CORE BARREL				FT			FT			FT
TOTAL D.P. & TOOLS			282655	FT		282655	FT		288888	FT
KEILY DOWN (BELOW R.B.)			1405	FT		1405	FT		2116	FT
DEPTH OF TOOLS			284060	FT		284060	FT		291004	FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	2840 FEET	2840 FEET	2910 FEET
DEPTH START OF TOUR	2779 FEET	2779 FEET	2840 FEET
FOOTAGE DRILLED	61 FEET	61 FEET	70 FEET

DAY WORK	HOURS						HOURS					
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	
PUMP	51/140	51/140	55/160						1700	1700	1700	
ROTARY SPEED	52	52	Misc						48	48	48	
WEIGHT ON BIT	30	30	CIRC						30	30	30	
MUD WEIGHT	9.6	9.6	9.6						9.6	9.6	9.6	
VISCOSITY	35	35	35						35	35	35	
WL F.C.												
pH												
MUD LEVEL IN TANKS												

Trip

NO.	SIZE	SERIAL	BIT KIND AND TYPE	LET SIZES IN T.O.	TOTAL HOURS	REMARKS
9	8 3/4	2484098	S 88	3-9	13.1	
10	8 3/4	33-493	S 88	3-9	4	

CORE	No	No	DST No	DEPTH	RECOVERY
TYPE			PPEFLOW		
FROM			FSI		
TO			VO		
RECOVERY			FSI		
HOURS			RECOVERY		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>FRASER</i>	<i>G. Sodergran</i>	<i>J. Petersen</i>
DERRICKMAN	<i>FRASER</i>	<i>J. Pedersen</i>	<i>G. FRASER</i>
HELPER	<i>VALQUIRTE</i>	<i>R. Rogers</i>	<i>D. Collins</i>
HELPER	<i>RINA</i>	<i>L. Nysslat</i>	<i>D. MACKINAC</i>
HELPER	<i>COX</i>	<i>L. Chernipevski</i>	<i>M. KING</i>
FIREMAN			
TOOL PUSHER			

Records
JEL
Trip
 M.J.
 Time
 230
 25
 25
 23
 25

SOBC W.M. E. POMPINO VT 1-13

		CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
OUR	FT	Kind	Amount			
				12 ⁰⁰	1 30	DRILLING
				1 30	1 45	RIG SERVICE
6	FT	KELZIN	100	1 45	4 30	DRILLING
	FT	GEL	4.00	4 30	5 30	CIRC TO WHT F.P.
	FT			5 30	6 00	Blow Kelly & RAT HOLE
	FT			6 00		TIGHT HOLE & Down Singles
5	FT				8 00	W/ Kelly
0	FT					
8	FT	TOUR 2		8 ⁰⁰	8 ³⁰	Rig Service Ch. B.O.P.
0	FT			8 ³⁰		Pumping Singles Out 14. Singles.
9	FT			12 ⁰⁰	12 ⁰⁰	Tight Up To 2800
	FT	Trip.		12 ⁰⁰	2 ⁰⁰	Finish Hoisting B. & #9.
	FT			2 ⁰⁰	3 ⁰⁰	Change Sprocket On Table.
8	FT			3 ⁰⁰	4 ⁰⁰	Wait On Phone Call.
6	FT					NOISE, ...
04	FT	TOUR 3		4 ⁰⁰	4 ¹⁵	Rig Service V Pops
	FEET			4 ¹⁵	7 ³⁰	CHANGE KEAMERS, MAKE UP PUMP TRIP
	FEET			7 ³⁰	8 ⁰⁰	IN PICK UP 10 SALS
	FEET			8 ⁰⁰	12 ⁰⁰	CLEAN 110 FT TO BTM
						DRILLING

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

TIME	DEPTH	TIME	FLOW	UNDERFLOW	OVERFLOW	UNC	UV	PV	YP	W/G	W/G	W/G	W/G	W/G	W/G	W/G	W/G
2:00 PM	3310	35	9.6	10.2	7.5	35											
4:00	2836	35	7.6	10.0	7.4	35											
4:00 To 8:00 PM	TRIPPING WIDE SLIP RUNNING																
8:00	2353	23	9.6	10.5	7.4	35											
11:00	3993	25	9.6	10.2	9.3	35	11	8	6	1	3	13.4	7.5	10	400	10.5	

WELL	#	IN	OUT
WELL 01	9019	4	4 1/4
WELL 02	9820	4 1/4	6 9
WELL 03	452	—	53
WELL 04	451	8 1/4	73
WELL 05	9023	8 1/4	116
WELL 06	51124	3 1/4	126
WELL 07	60454	0 1/4	26

Signature of Engineer
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO *3*

FIELD *Wild Cat* WELL NAME *K. P. Capria 1-13D*

SEC TWP Rpt W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT *FEB. 27/71*

19

5015
CHEMICAL
KIND

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS <i>21</i> D.P. NO	<i>198987</i>	FT	<i>NO22</i>	<i>208532</i>	FT	<i>NO23</i> <i>217980</i> FT
SINGLE " D.P. NO.		FT			FT	<i>NO 2</i> <i>6338</i> FT
X-OVER SUB " O.D.		FT			FT	
OTHER " O.D.		FT			FT	
DRILL COLLARS <i>16 7/8</i> O.D.	<i>46565</i>	FT	<i>46565</i>		FT	<i>46565</i> FT
DRILL COLLARS <i>2 7/8</i> O.D.	<i>3860</i>	FT	<i>3860</i>		FT	<i>3860</i> FT
REAMER <i># 9 3/4</i> O.D.	<i>534</i>	FT	<i>534</i>		FT	<i>534</i> FT
STABILIZER <i># 10 1/2</i> O.D.	<i>460</i>	FT	<i>460</i>		FT	<i>460</i> FT
JARS <i>STAB # 9028</i> O.D.	<i>569</i>	FT	<i>569</i>		FT	<i>569</i> FT
BUMPER SUB		FT			FT	
BIT OR CORE BARREL		FT			FT	
TOTAL D.P. & TOOLS	<i>250975</i>	FT	<i>260520</i>		FT	<i>276306</i> FT
KELLY DOWN (BELOW R.B.)	<i>1605</i>	FT	<i>4205</i>		FT	<i>1594</i> FT
DEPTH OF TOOLS	<i>352580</i>	FT	<i>264725</i>		FT	<i>277900</i> FT
TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	<i>2525</i>	FEET	<i>2647</i>		FEET	<i>2779</i> <i>2525</i> FEET
DEPTH START OF TOUR	<i>2372</i>	FEET	<i>2525</i>		FEET	<i>2647</i> <i>2692</i> FEET
FOOTAGE DRILLED	<i>133</i>	FEET	<i>122</i>		FEET	<i>132</i> FEET

Gal 200
Kelcan 50
Causzic 50

DAY WORK	HOURS											
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>
ROTARY SPEED	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>	<i>55</i>
WEIGHT ON BIT	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>	<i>30</i>
MUD WEIGHT	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.7</i>	<i>9.7</i>	<i>9.7</i>	<i>9.5</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>	<i>9.6</i>
VISCOSITY	<i>35</i>	<i>36</i>	<i>36</i>	<i>36</i>	<i>37</i>	<i>37</i>	<i>36</i>	<i>36</i>	<i>37</i>	<i>38</i>	<i>38</i>	<i>38</i>
W.L.F.C.				<i>12</i>				<i>13 1/2</i>				
pH				<i>9.5</i>				<i>9.0</i>				
MUD LEVEL IN TANKS								<i>36"</i>				

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO
<i>9</i>	<i>8 3/4</i>	<i>246409K</i>	<i>Residual SECURITY</i>	<i>588</i>	<i>3-9</i>	<i>40</i>	<i>2230</i> <i>2779</i> <i>741</i> <i>135</i>

CORE No	No	DST No	FROM	TO
TYPE		PREFLOW		
FROM		ISI		
TO		V.O		
Recovery		FSI		
HOURS		RECOVERY		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>FRASER</i>	<i>G. Sodergren</i>	<i>J. Jensen</i>
DERRICKMAN	<i>FRASER</i>	<i>J. Pedersen</i>	<i>FRASER</i>
HELPER	<i>VALQUETTE</i>	<i>R. Rogers</i>	<i>COLINS</i> <i>W.L. 2600</i> <i>1/2</i>
HELPER	<i>COX</i>	<i>L. Nycolat</i>	<i>MOCKNAK</i> <i>TOTCO 2760</i> <i>3/4</i>
HELPER		<i>L. Cierpinski</i>	<i>NYCOLAT</i>
FIREMAN			
TOOL PUSHER	<i>A. Bergkamp</i>		

SORC WM F. Peterson YT 1-13

OTHER HOURLY OPERATING DETAIL
WORK DONE

19
FOUR
80 FT
38 FT
FT
FT
65 FT
60 FT
34 FT
60 FT
69 FT
FT
06 FT
94 FT
00 FT
R
FEET
FEET
FEET
HOURS
12:00 PM
51
14:00
52
30
9.6
38

Kind	Amount	From	To
		12:00	1:15
		1:15	1:30
		1:30	5:00
TOUR 2			
		8:00	9:00
Bel 200 th		9:00	9:30
Kellan 50 th		9:30	10:00
Caustic 50 th		10:00	11:00
		11:00	11:45
		11:45	2:00
		2:00	2:30
		2:30	4:00
TOUR 3			
400	4:00	7:30	
100	7:30	7:45	
100	7:45	11:00	
	11:00	11:30	
	11:30	12:00	

Drilling
SURVEY @ 2415' - 1"
R.O. SERVICE
Drilling

Drig.
Rig Service Ch. B.O.P.
Work Tight Con.
Drig.
Work Tight Con.
Drig.
Survey
Drig.

Drilling
Rig Service ✓ Bops
Drilling
SURVEY
Drilling

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

TIME	DEPTH	TEMP	SP. GR.	W. TEMP	W. GR.	W. TEMP	W. GR.	W. TEMP	W. GR.	W. TEMP	W. GR.
2:00	47	15	1.0	22	25	36					
4:00	47	15	9.0	12.2	15	36					
6:00	47	15	9.0	12.4	17	36					
8:00	47	14	9.0	12.2	15	35	7	5	4.9	1.1	1.1
10:00	50	14	9.7	12.2	17	37					
11:00	50	14	9.7	12.6	16	36					
12:00	50	14	9.7	12.0	16	36					
1:00	467	16	9.6	12.4	15	38					
2:00	467	15	9.0	12.3	15	38					
3:00	475	15	9.6	12.2	16.6	35	12	8	4	1.1	1.2
4:00	475	15	7.6	10.2	14	35					

Reading	ft	Temp	Sp. Gr.
1/2"	7049	21.7	1.024
3/4"	7050	21.7	1.024
1"	7051	21.7	1.024
1 1/2"	7052	21.7	1.024
2"	7053	21.7	1.024

TOUR REPORT

CONTRACTOR **G. P. Orly.**

RIG NO **14.**

FIELD **Wild Cat** WELL NAME **E. Porcupine #1-43**

SEC TWP Rpt W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **Feb 26** 1971

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS 16 4 1/2 DP	NO	151705 FT	NO	151705 FT	NO	179960 FT
SINGLE 1 DP	NO	3167 FT	NO	3167 FT	NO	3167 FT
X-OVER SUB ... O D		FT		FT		FT
OTHER ... O D		FT		FT		FT
DRILL COLLARS 15 7" O D		46565 FT		46565 FT		46565 FT
DRILL COLLARS 2 7 3/4 O D	NO	3860 FT	NO	3860 FT	NO	3860 FT
REAMER #9830 O D	KIND Chex 6	534 FT	KIND	534 FT	KIND	534 FT
STABILIZER #4510 O D	KIND Blade	460 FT	KIND	460 FT	KIND	460 FT
WARS Stab-#9028 O D	KIND Cushion	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB		FT		FT		FT
BIT OR CORE BARREL		FT		FT		FT
TOTAL DP & TOOLS		206862 FT		225597 FT		239200 FT
KELLY DOWN (BELOW R B)		4000 FT		1600 FT		4085 FT
DEPTH OF TOOLS		210862 FT		227197 FT		239200 FT

TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR		2108 FEET		2271 FEET		2342 FEET
DEPTH START OF TOUR		2038 FEET		2108 FEET		2271 FEET
FOOTAGE DRILLED		FEET		163 FEET		121 FEET

		HOURS				HOURS				HOURS			
		2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:30 AM	12:00 AM	2:30 PM	4:30 PM	6:30 PM	8:30 PM	10:30 PM	12:00 PM
PUMP	s.p.m. p.s.i.	50 1400	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600	55 1600
ROTARY SPEED	R P M	50	55	55	55	55	55	55	55	55	55	55	
WEIGHT ON BIT	M lbs	30	30	30	30	30	30	30	30	30	30	30	
MUD WEIGHT	lb gal	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	9.6	
VISCOSITY	sec. qt	35	35	34	35	35	35	35	35	35	35	35	
W L F C	cc. 32nd			132				12.8 302					
pH				9				8.5					
MUD LEVEL IN TANKS	Ft. Ins												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZE IN 1/32	TOTAL HOURS	FROM	TO	REMARKS
9	8 3/4	74349-R	SBC SBB	3-9	18 1/2	2:33	3:47	354 17A

CORE No	No	DST No	FROM	TO	MUD ENGINEER
TYPE		PREFLOW	ms. t.p.	ms. t.p.	
FROM		ISI	ms. t.p.	ms. t.p.	
TO		VO	ms. t.p.	ms. t.p.	
Recovery		FS	ms. t.p.	ms. t.p.	
HOURS		RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	C. Fraser	G. Sudergren	J. Petersen
DERRICKMAN	C. Fraser	J. Pedersen	G. Masch
HELPER	R. Valiquette	R. Rogers	R. Collins
HELPER	R. Cox	L. Nycolat	F. Johnson
HELPER		L. Chernak	M. Lockman
FIRM MAN			
TOO. PUNCH	Jagachamp		

WELL CHEMICAL Kind
 KELLY
 LAUSTIC
 WEL
 KELLY
 LAUSTIC
 WEL
 28.77
 28.71
 28.5
 28.4
 28.3
 28.2
 28.1
 28.0
 27.9
 27.8
 27.7
 27.6
 27.5
 27.4
 27.3
 27.2
 27.1
 27.0
 26.9
 26.8
 26.7
 26.6
 26.5
 26.4
 26.3
 26.2
 26.1
 26.0
 25.9
 25.8
 25.7
 25.6
 25.5
 25.4
 25.3
 25.2
 25.1
 25.0
 24.9
 24.8
 24.7
 24.6
 24.5
 24.4
 24.3
 24.2
 24.1
 24.0
 23.9
 23.8
 23.7
 23.6
 23.5
 23.4
 23.3
 23.2
 23.1
 23.0
 22.9
 22.8
 22.7
 22.6
 22.5
 22.4
 22.3
 22.2
 22.1
 22.0
 21.9
 21.8
 21.7
 21.6
 21.5
 21.4
 21.3
 21.2
 21.1
 21.0
 20.9
 20.8
 20.7
 20.6
 20.5
 20.4
 20.3
 20.2
 20.1
 20.0
 19.9
 19.8
 19.7
 19.6
 19.5
 19.4
 19.3
 19.2
 19.1
 19.0
 18.9
 18.8
 18.7
 18.6
 18.5
 18.4
 18.3
 18.2
 18.1
 18.0
 17.9
 17.8
 17.7
 17.6
 17.5
 17.4
 17.3
 17.2
 17.1
 17.0
 16.9
 16.8
 16.7
 16.6
 16.5
 16.4
 16.3
 16.2
 16.1
 16.0
 15.9
 15.8
 15.7
 15.6
 15.5
 15.4
 15.3
 15.2
 15.1
 15.0
 14.9
 14.8
 14.7
 14.6
 14.5
 14.4
 14.3
 14.2
 14.1
 14.0
 13.9
 13.8
 13.7
 13.6
 13.5
 13.4
 13.3
 13.2
 13.1
 13.0
 12.9
 12.8
 12.7
 12.6
 12.5
 12.4
 12.3
 12.2
 12.1
 12.0
 11.9
 11.8
 11.7
 11.6
 11.5
 11.4
 11.3
 11.2
 11.1
 11.0
 10.9
 10.8
 10.7
 10.6
 10.5
 10.4
 10.3
 10.2
 10.1
 10.0
 9.9
 9.8
 9.7
 9.6
 9.5
 9.4
 9.3
 9.2
 9.1
 9.0
 8.9
 8.8
 8.7
 8.6
 8.5
 8.4
 8.3
 8.2
 8.1
 8.0
 7.9
 7.8
 7.7
 7.6
 7.5
 7.4
 7.3
 7.2
 7.1
 7.0
 6.9
 6.8
 6.7
 6.6
 6.5
 6.4
 6.3
 6.2
 6.1
 6.0
 5.9
 5.8
 5.7
 5.6
 5.5
 5.4
 5.3
 5.2
 5.1
 5.0
 4.9
 4.8
 4.7
 4.6
 4.5
 4.4
 4.3
 4.2
 4.1
 4.0
 3.9
 3.8
 3.7
 3.6
 3.5
 3.4
 3.3
 3.2
 3.1
 3.0
 2.9
 2.8
 2.7
 2.6
 2.5
 2.4
 2.3
 2.2
 2.1
 2.0
 1.9
 1.8
 1.7
 1.6
 1.5
 1.4
 1.3
 1.2
 1.1
 1.0
 0.9
 0.8
 0.7
 0.6
 0.5
 0.4
 0.3
 0.2
 0.1
 0.0

1971
 DUR
 0 FT
 7 FT
 FT
 FT
 5 FT
 0 FT
 4 FT
 0 FT
 9 FT
 FT
 FT
 FT
 5 FT
 0 FT
 FEET
 FEET
 FEET
 HOURS
 12:00 P.M.
 55
 16:00
 55
 30
 96
 35
 ON
 PORT
 2
 1/2

MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	12 ¹⁵	Rig Service.
		12 ¹⁵	2 ⁰⁰	Trip In Hole.
		2 ⁰⁰	3 ³⁰	Ream 3 Singles To Bottom.
		3 ³⁰	5 ⁰⁰	Drilling.
TOUR 2		8 ⁰⁰	8 ¹⁵	Drilg.
KELZAN	50	8 ¹⁵	8 ⁴⁵	Rig Service Ch. B.O.P.'s Rig Savers.
CAUSTIC	50	8 ⁴⁵	9 ⁰⁰	Survey. 2100 1/2°
GEL	200	9 ⁰⁰	3 ⁰⁰	Drilg.
		3 ⁰⁰	3 ⁴⁵	Survey. 2258 1/2°
		3 ⁴⁵	4 ⁰⁰	Drilg.
TOUR 3		4 ⁰⁰	7 ⁰⁰	Drilling.
KELZAN	50	7 ⁰⁰	7 ³⁰	Rig Service, Repair unions on steel lines
CAUSTIC	50	7 ³⁰	11 ⁰⁰	Drilling
GEL	200	11 ⁰⁰	11 ¹⁵	Work on pump Chute
		11 ¹⁵	11 ³⁰	Drilling.
		11 ³⁰	12 ⁰⁰	Make sand, Lay Down Washed Sgl.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

MUD + DESILTER DATA

TIN	DEPTH	TRIDE FOR GAL	FLOWLINE	WATER FLOW	WATER FLOW	VISC	AV	PU	YD	W. GEL	10 MIN GEL	W.C	PH	CE	CE	IF	RT
4:00 PM	2017	45	9.6	10.4	9.5	34											
	2079	40	9.5	11.2	9.4	34											
		40	9.5	10.7	9.5	35											
		45	9.6	10.6	9.5	34											
		45	9.6	10.7	9.5	35											
2:00 PM		45	9.6	10.3	9.5	35	6.5	4.5	4.0	1	1	14.3	9.5	20	18	15	6.572
	2275	44	9.6	10.3	9.5	34											
	2310	44	9.6	10.7	9.5	34											
	2335	25	9.6	10.4	9.4	35											
	2369	25	9.6	10.2	9.4	35											
12:00 M	2398	25	9.6	10.3	9.5	35	7	5	4	1	2	14.5	9.0				

SEALER AND STABILIZER DATA

TIME	#	1/2S TODAY	CEM. HRS
NEAR BIT	9040	—	36 1/4
NEAR BIT	9330	18 1/4	42 1/4
BLADE	453	—	53
BLADE	451	18 1/4	43 1/4
CUSHION	9023	18 1/4	86 1/4
10' D.C.	4	13 3/4	96 1/4
30' D.C.	66452	18 1/4	96 1/4

REMOVED AND STABILIZER 9. TO BOTTOM

Signature area with a signature and the text "SIGNATURE COMPANY ENGINEER".

TOUR REPORT

CONTRACTOR *G.P. Drilling* RIG NO

FIELD *Wild Cat* WELL NAME

DRILLING DEEPENING COMPLETING *E. P. P. I-13*
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

FEB. 25/71 19

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR												
STANDS	DP	NO 13	12	34	13	FT	NO 14	13	28	7	1	FT	NO 14	13	28	7	1	FT		
SINGLE	DP	NO. 2			62	93	FT	NO 1			31	57	FT	NO 2			63	24	FT	
X OVER SUB	OD						FT													
OTHER	OD						FT													
DRILL COLLARS	7" O.D.	18			55	89	1	FT	18			55	89	1	FT		55	89	1	FT
DRILL COLLARS	7 3/4" O.D.	NO. 2			38	60	FT	NO 2			38	60	FT	NO			38	60	FT	
REAMER	# 7830 O.D.	KIND			6	4	FT	KIND			5	34	FT	KIND			5	34	FT	
STABILIZER	SHADE O.D.	# 451			4	60	FT	KIND			4	60	FT	RIND			4	60	FT	
JARS	STAC # 7028	KIND			5	69	FT	KIND			5	69	FT	KIND			5	69	FT	
BUMPER SUB							FT						FT							
BIT OR CORE BARREL							FT						FT							
TOTAL D.P. & TOOLS					19	1020	FT				20	0515	FT				20	0515	FT	
KFULLY DOWN (BELOW R B)					25		FT				33	00	FT				33	00	FT	
DEPTH OF TOOLS					19	45	20	FT			20	38	15	FT			20	38	15	FT
TOUR		MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR												
DEPTH END OF TOUR					1945	FEET					2038	FEET					2038	FEET		
DEPTH START OF TOUR					1859	FEET					1945	FEET								
FOOTAGE DRILLED					11	4	FEET				93	FEET								

DAY WORK	HOURS							HOURS						
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:30 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.		
PUMP	55/1600	55/1600	55/1600	55/1600	55/1600	55/1600	55/1600							
ROTARY SPEED	60	60	60	60	60	60	60							
WEIGHT ON BIT	30	30	30	30	30	30	30							
MUD WEIGHT	9.6	9.6	9.6	9.5	9.5	9.5	9.5							
VISCOSITY	36	35	36	35	35	35	35							
W.L.F.C.				12			12							
PH				9.5			9.2							
MUD LEVEL IN TANKS														

NO.	SIZE	FRIAL	BIT KIND AND TYPE	JET SIZES IN IN.	TOTAL HOURS	FROM	TO	REMARKS
8	8 3/4	DP929	SMITH SVH-2	3-9	35	1657	1238	338 15.5 4 1-1
9	8 3/4	2484JA-R	SEC. SBB	3-9				

CORE	No	No	DST No	FROM	TO	REMARKS
TYPE			PREFLOW	mins	FHP	REMARKS
FROM			IS	mins	FHP	REMARKS
TO			VO	mins	FHP	REMARKS
Recovery			FSI	mins	FHP	REMARKS
HOURS			RECOVERY			

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	<i>T. RASKER</i>	<i>G. Sodergren</i>	<i>J. PETERSEN</i>
DERRICKSMAN	<i>T. RASKER</i>	<i>J. Pedersen</i>	<i>FRASER</i>
HELPER	<i>VALUETTE</i>	<i>R. Rogers</i>	<i>COYNE</i>
HELPER	<i>APNE</i>	<i>L. Nicolae</i>	<i>JURSON</i>
HELPER	<i>COX</i>	<i>L. Charsanski</i>	<i>MOCKNAR</i>
FIREMAN			
TOOL PUSHER	<i>A. Rysenbampf</i>		

SOBC
 CHEMICAL
 Kind
7" WATER
Get-200
Kelzan-50
Caustic-50

TIME	DEPTH	REMARKS
1:00 PM	1840	45
3	868	45
5	1840	45
7	924	45
9	952	45
11	1853	45
11:00 AM	2015	45
3:00		
12:00 PM	2226	45

SOBC W/M EAST TORQUINA YT I-13.

CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
19		1200	200	Drilling
TOUR		200	215	Rig Service
74	Gal	215	400	Drilling
FT				
77	Kelzan	400	430	Swamp (1370)
FT				
	SOLICIDIN	430	800	Drilling
FT				
	7" WATER.			
FT				
81				
FT				
84	TOUR 2	800	825	Drilling
FT				
86	Gal-200#	825	900	Service Rig. Ch. R. g Savers - B.O.P.
FT				
89	Kelzan-50#	900	215	Drilling (1370)
FT				
	Caustic-50#	215	245	Wire to Trip
FT				
	2" Water.	245	400	Hoisting Bit #8.
FT				
15				Tight Spot At 1390
FT				
20				Picked Up Kelly To Clean Out.
FT				
25				
FT				
	TOUR 3			
FEET	400			FINISH HOISTING BIT # 8 Hole
FEET		800		TIGHT, CHANGE RUBBER ON STABILIZER
FEET	800			Break Kelly off oil Swivel
FEET		1130		Replace Seals in Swivel
FEET	1130			Pick up BHA Hole Assembly & 1415
HOURS				UP BIT.
12:00 P.M.		1200		

CEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

MUD + DESILTER DATA

TIME	DEPTH	TIME FOR 1 GAL	CLOW VISC	WATER FLOW	OVER FLOW	VISC	AU	PV	YP	1000	1000	W.L.	PH	G ⁺	G ⁻	12
1:20 PM	1844	45	9.6	10.6	9.4	35										
3	1868	45	9.6	10.5	9.5	36										
5	1893	45	9.6	10.5	9.5	35										
7	1934	40	9.4	10.5	9.4	35	7	5	4	1	2	14.6	8.5	3	35	74
9	1952	45	9.5	10.5	9.4	36										
11	1983	40	9.5	10.6	9.4	35										
1:00 PM	2015	40	9.5	10.6	9.4	36										
3:00	—		9.5	10.7	9.4	34	7.6	5	5	1	2					
12:00 PM	2038	45		10.2	9.3											

WATER + SWIVEL DATA

Item	#	Loss DATA	UNIT. HRS
WATER BIT	9,540	—	25.2
WATER BIT	2,932	13	25
SWIVEL	453	—	33
SWIVEL	45	13	35
SWIVEL	7,028	13	65*
SWIVEL	5,414	13	75
SWIVEL	2,452	13	78

* Change in position

13. # 5 HADDE HEIGHT UNDERCOURSE
 KEENEY + MADE IN GAUGE
 CHANGE RUBBER TO NEW STATE
 CHANGE FROM 30 TO 11
 10000 SCREEN FOR TRIP

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP RIG** RIG NO **12**

FIELD **WILDCAT** WELL NAME _____ LSD _____ SEC _____ TWP _____
 DRILLING DEEPENING COMPLETING **EAST HOSPITAL** **1-3** **FEB 24** 1971
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

DRILLING ASSEMBLY		END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR			
STANDS	DP NO 10	950	25 FT	NO	1076	70 FT	NO 12	1139	25 FT
SINGLE	DP NO 2	630	00 FT	NO	3173	00 FT	NO 2	6313	00 FT
X-OVER SUB	OD		FT		FT			FT	
OTHER	OD		FT		FT			FT	
DRILL COLLARS	7 O.D. 18	558	91 FT		558	91 FT		558	91 FT
DRILL COLLARS	7 3/4 O.D. NO 2	38	60 FT	NO	38	60 FT	NO	38	60 FT
REAMER # 9B30	OD KIND NEAR BIT	5	34 FT	KIND	5	34 FT	KIND	5	34 FT
STABILIZER # 451	OD KIND BLADE	4	60 FT	KIND	4	60 FT	KIND	4	60 FT
JARS STAB # 912B	OD KIND CUSHION	5	69 FT	KIND	5	69 FT	KIND	5	69 FT
BUMPER SUB.			FT		FT			FT	
BIT OR CORE BARREL			FT		FT			FT	
TOTAL D.P. & TOOLS		1626	39 FT		1719	17 FT		1815	54 FT
KELLY DOWN (BELOW R B)		31	— FT		42	05 FT		154	60 FT
DEPTH OF TOOLS		1657	39 FT		1761	22 FT		1831	10 FT

Bel-2005
Kalsar-50
Conat. 250
Dow 100

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP					5:16	5:16	5:16	5:16	5:16	5:16	5:16	5:16
ROTARY SPEED					65	65	65	65	65	65	65	65
WEIGHT ON BIT					30	30	30	30	30	30	30	30
MUD WEIGHT					92	92	92					
VISCOSITY					35	35	35	35	35	35	35	35
W.L.F.C					12	12	12	12	12	12	12	12
pH					8.5	8.5	8.5					

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/2"	TOTAL INCHES	FROM	TO	REMARKS
8	8 3/4	DP99A	SHT SVH-J	3-9				

CORE No	No	DST No	FRU J	TYPE	PREFLOW	FROM	TO	RECOVERY	HOURS

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	FRASER		FRASER
DERRICKMAN	FRASER		PETERSEN
HELPER	VALDUBATE		COLLINS
HELPER	RINE		JUNSON
HELPER	COX		BLACKWELL
FIREMAN			
TOOL PUSHER			

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WILDCAT** WELL NAME **EAST DISCOVERY I-13** LSD **SEC TWP** **R40 W**
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING **FOR 24 HOURS ENDING 12 MIDNIGHT** **FEB 23 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
	NO	FT	NO	FT	NO	FT	NO	FT	
STANDS D.P.	8	76040	9	85557	10	95025			
SINGLE D.P.	2	6330	2	6321		6300			
X-OVER SUB O.D.									
OTHER O.D.									
DRILL COLLARS 7 O.D.	13	55891		55891		55891			
DRILL COLLARS 7 1/2 O.D.	NO 2	3860	NO	3860	NO	3860			
REAMER # 9049 O.D.	KIND NEAR BIT	538	KIND	538	KIND	538			
STABILIZER # 458 O.D.	KIND SLAKE	460	KIND	460	KIND	460			
WAS STAB # 9028	KIND CUSHION	569	KIND	569	KIND	569			
BUMPER SUB									
BIT OR CORE BARREL									
TOTAL D.P. & TOOLS		143688		153196		162643			
KELLY DOWN (BELOW R.B.)		1100		1805		31			
DEPTH OF TOOLS		144788		155001		165743			

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	HOURS	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	HOURS	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	HOURS
	1447	1288	159		1550	1447	103		1657	1550	107	

DAY WORK	HOURS											
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 AM
PUMP	50	50	50	50	50	50	50	50	50	50	50	50
ROTARY SPEED	90	90	90	90	90	90	90	90	90	90	90	90
WEIGHT ON BIT	30	30	30	30	30	30	30	30	30	30	30	30
MUD WEIGHT	9.6	9.5	9.6	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
VISCOSITY	36	35	36	38	37	37	35	34	33	33	35	35
W.L.F.C.	14.0	14.6	15.2	14.9					10.2	10.2		
pH	11.0	11.0	10.5	10.0			9.5	9.5	9.5	9.0		

NO.	SIZE	SERIAL	BIT KIND AND TYPE	ET SIZES			REMARKS
				IN	OUT	REMARKS	
7	8 1/2	23074	HW XIG-J	3-9	24	12.21	1657 436 18.2

SIGNATURES	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
	DRILLER	DERICKMAN	HELPER	DRILLER	DERICKMAN	HELPER	DRILLER	DERICKMAN	HELPER
	A. WAX	J. SCHWARTZ	A. HILF	C. FRASEK	C. FRASEK	L. VAN WAGEN	G. SPERBERG	J. PAPERSON	K. LUGERS
	R. COX	J. WANGER		M. RINE					

NOTE: JOG HANSEN TWO SURVIVORS (7' + 8' + 9')
TOOL SEALS OK

GEL
KELZAN
DISCONE 13

Sec
KELZAN
DISCONE 13

Gel
KELZAN

Time
DEPTH
3 1310
5 1383
7 1430
9 1460
11
11:45 1500
3 1540
5 1570
7
9
11
RANGER
KIND
KELZAN
DISCONE
DISCONE
DISCONE
DISCONE
DISCONE

SOBC WM EAST - BRIDGE YR I-13

1971		CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
OUR	FEET	Kind	Amount			
				12 ⁰⁰	12 ¹⁵	RIG SERVICE
05	FT	GEL	300 #	12 ¹⁵	2 ¹⁵	DRILLING
00	FT	KELZAN	50 #	2 ¹⁵	3 ¹⁵	WORK TIGHT CONNECTION
	FT	DOLOMITE "B"	3 #	3 ¹⁵	3 ³⁰	RUN SURVEY @ 1262
	FT			3 ³⁰	4 ³⁰	DRILLING
	FT			4 ³⁰	5 ¹⁵	WORK TIGHT CONNECTION
	FT			5 ¹⁵	8 ²⁰	DRILLING
08	FT			8 ⁰⁰	8 ¹⁵	SURVEY
00	FT	Gel	400 #	8 ¹⁵	8 ³⁰	R.S. + CHECK BOP'S
09	FT	KELZAN	100 #	8 ³⁰	9 ²⁵	DRILLING
	FT	DOLOMITE "B"	4 #	9 ⁴⁵	11 ¹⁵	WORK TIGHT CONNECTION
	FT			11 ¹⁵	12 ³⁰	DRILLING
13	FT			12 ³⁰	1 ¹⁵	WORK PIPE + SURVEY
	FT			1 ¹⁵	4 ⁰⁰	DRILLING
13	FT			4 ⁰⁰	5 ¹⁵	DRILLING
	FEET	GEL	400 #	5 ¹⁵	5 ³⁰	SERVICE RIG, CHECK BOP'S
	FEET	KELZAN	100 #	5 ³⁰	7 ⁰⁰	DRILLING
	FEET			7 ⁰⁰	7 ³⁰	WORK TIGHT CONNECTION
	FEET			7 ³⁰	7 ⁴⁵	SURVEY @ 1610
	FEET			7 ⁴⁵	11 ¹⁵	DRILLING
	HOURS			1 ¹⁵	12 ⁰⁰	Blow Kelly - HOIST BIT # 7 - 7647
12:30 PM						DUMPER TANKS (SUCKER # 2, SUCTION # 1)

CEMENTING TESTING FINISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES

PLAN + RES. ETC. DATA

TIME	DEPTH	TIME (min)	FLUID LOSS	UNDRY FLUID	DRY FLUID	WILE	HV	PV	TP	100' GEL	10' GEL	WLB	PH	GR	CC	PR
1:00 PM	1310	45	9.6	13.9	9.2	36										
3	1350	50	9.5	13.7	9.3	35										
5	1383	48	9.6	13.7	9.3	36										
7	1420	40	9.7	13.1	9.4	38										
9	1460	45	9.7	12.1	9.4	37										
11	-	-	-	-	-	-	8	6	4	1	1	14.2	9.5	20	300	TRACE
1:00 PM	1500	50	9.7	11.7	9.6	35										
3	1540	45	9.7	12.4	9.5	36										
5	1570	43	9.7	11.3	9.6	33	10	7	6	0	2	14.0	9.0	TR	800	0
7		40	9.7	11.0	9.6	33										
9		40	9.7	11.3	9.6	33										
11		40	9.7	10.8	9.6	35										

RAMMER + STABILIZER DATA

KIND	#	11" STABILIZER	10" STABILIZER
WELL BIT	90249	31 1/2	36 1/2
WELL BIT	9830		
SLAVE	450	21 1/2	53
SLAVE	451		
CUSHION	9028	21 1/2	43
10" D.C.	51124	21 1/2	53
30" D.C.	16452	21 1/2	53

HOISTING ASSEMBLY W/ STABILIZER ASSEMBLY

CURRENTLY WORKING W/ STABILIZER ASSEMBLY

John James
SUPERVISOR

TOUR REPORT

CONTRACTOR **G.P. DRLG.** RIG NO **14**

FIELD NO **14097**

WELL NAME

LSD

SEC

TWP

RANGE

W

DRILLING DEEPENING COMPLETING **E PORCUPINE 1-13**

REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 M. NIGHT **FEB. 22 1971**

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR					
STANDS	D.P.	NO 5	477	18	FT	NO	572	42	FT	NO 6	572	37	FT
SINGLE	D.P.	NO.			FT	NO			FT	NO 2	614	3	FT
X OVER SUB	O.D.				FT				FT				FT
OTHER BT. SUB	O.D.		466		FT		466		FT				FT
DRILL COLLARS	7 O.D.	18	558	91	FT		558	91	FT		558	91	FT
DRILL COLLARS	7 3/4 O.D.	NO 2	386	0	FT	NO	386	0	FT	NO	386	0	FT
REAMER # 9049	O.D.	KIND NEAR BIT			FT	KIND			FT	KIND	538		FT
STABILIZER # 458	O.D.	KIND BLADE	460		FT	KIND	460		FT	KIND	460		FT
JARS # 9008	STAB	KIND LUSHION			FT	KIND			FT	KIND LUSHION	569		FT
BUMPER SUB					FT				FT				FT
BIT OR CORE BARREL					FT		1179	19	FT				FT
TOTAL D.P. & TOOLS			1083	95	FT		1083		FT				FT
KELLY DOWN (BELOW R.B.)			4000		FT		3405		FT				FT
DEPTH OF TOOLS			1123	95	FT		1213	24	FT				FT

ENT =
KELLY
L. W. TEE
COOLING

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	1123 FEET	1213 FEET	1288 FEET
DEPTH START OF TOUR	1065 FEET	1123 FEET	1213 FEET
FOOTAGE DRILLED	58 FEET	90 FEET	75 FEET

	DAY WORK																					
	2:00 AM		4:00 AM		6:00 AM		8:00 AM		10:00 AM		12:00 AM		2:00 PM		4:00 PM		6:00 PM		8:00 PM		10:00 PM	
PUMP	SP.M. D.S.I.	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400	50 1400
ROTARY SPEED	R.P.M.	70	80	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90	90
WEIGHT ON BIT	M. lbs	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
MUD WEIGHT	lb gal	8.6	8.7	8.6	8.6	8.6	8.7	8.8	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2	9.2
VISCOSITY	sec qt	35	35	34	34	34	34	34	36	36	36	36	36	36	36	36	36	36	36	36	36	36
W.L.F.C.	cc 32nd	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2	11.2
pH		11.0			10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5	10.5
MUD LEVEL IN TANKS	Ft Ins																					

NO.	SIZE	SERIAL	BIT KIND AND TYPE	LET SIZES IN INCH	TOTAL FEET	FROM	TO
6	8 1/4	28078	H.W. XIG	3-9 15 3/4	1037	1221	184
7	8 3/4	28074	H.W. XIG.	3-9			

CORE No	No	DST No	FROM	TO	RECOVERY
TYPE	CORE FLOW REGIME STIFF ASSEMBLY (SEE FOR B1)				
FROM	15 1/2				
TO	10 3/4				
RECOVERY	FS				
HOURS	RECOVERY				

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DRILLER	A. NAST	FRASAK	B. Sodergren
DERRICKMAN	L. ABRAHAM		J. Pedersen
HELPER	J. SCHENK	VALUETTE	R. Rogers
HELPER	H. ALEX	R. JOEK	L. Ny
HELPER	R. COX	RINE	
FIREMAN			
RECORD MAN			

MUD WEIGHT

TIME

1096

1104

1140

1160

1159

1224

123

1213

1213

1253

SOBC W.M. E. ROEPPING YT 1-13

1971 TOUR FEET	CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
	Kind	Amount			
37			12 ³⁰	12 ³⁰	DRILLING
43			12 ³⁰	12 ⁴⁵	RIG SERVICE
			12 ⁴⁵	1 ⁰⁰	RUN SURVEY
			1 ⁰⁰	4 ⁰⁰	DRILLING
91			4 ⁰⁰	4 ³⁰	CIRC. & RUN SURVEY @ 1059
60			4 ³⁰		TRIP OUT, LAY DOWN CUSHION.
38					STABILIZER, MOVE BLADE
60	GAL = 2.00			6 ³⁰	STABILIZER IN 40 FEET
69	KALZAN = 50		6 ³⁰	8 ⁰⁰	ABOVE BIT & RUN IN
	WATER = 1 in.		8 ⁰⁰	8 ¹⁵	DRILLING
	COOLIDGE = 3		8 ¹⁵	10 ¹⁵	WAT. PAPER & RIG SERVICE
			10 ¹⁵	10 ⁴⁵	DRILLING
			10 ⁴⁵	12 ⁴⁵	WAT. PAPER & SURVEY
			12 ⁴⁵	1 ¹⁵	DRILLING
			1 ¹⁵	11 ⁰⁰	WAT. PAPER & SURVEY
			4 ⁵⁰	5 ¹⁵	DRILLING
			5 ¹⁵	5 ³⁰	Survey 1221
			5 ³⁰	6 ⁰⁰	Service R.y. Ch. B.O.P.
			6 ⁰⁰	7 ⁰⁰	Give Hole to Trip (After Survey)
			7 ⁰⁰	8 ¹⁵	Hoisting Bit = 6.
			8 ¹⁵	9 ⁰⁰	Change rig + Picking up 1700 Stabilizer.
			9 ⁰⁰	9 ³⁰	Run In 10.2 = 7.

50 1400	ELEMENTING TESTING FISHING SPECIAL JOB DETAILS INCLUDING ENGINEERING SUMMARIES				
70			9 ⁰⁰	10 ⁴⁵	Drilling.
30m.	MJUT Desinter Data		10 ⁴⁵	11 ¹⁵	Run Survey 1258 - Change Stoker
93			11 ¹⁵	12 ⁰⁰	Drilling.
34					

TIME	DEPTH	TIME GAL	FLUID VISC	WATER FLOW	DRILL FLUID	VIC	AV	PV	YP	INIT GEL	10 MIN GEL	W.L.	PH	Ca	CE	PA
1:00	1070	75	8.6	10.1	8.5	35										
3	1090	65	8.7	11.7	8.5	35	9	6.2	5.2	1	4	13.2	11.0	20	125	
5																
7	1104	60	8.6	11.4	8.5	34										
9	1140	35	8.7	13.2	8.6	34										
11	1160	35	8.8	12.8	8.6	34										
1:00	1189	36	9.2	10.3	8.6	36	10	6.2	6.2	2	6	14.4	10.5	20		14
3	1204	40	9.3	13.0	9.2	37										
5	1213	25	9.3	10.0	9.2	36										
7	1213															
9	1213	32	9.3	9.8	9.2	34										
11	1258	31	9.2	9.6	9.1	35										

Number	Size	W.L.	PH
Kind	#		
Number	9049	14.5	11.5
Number	9532	14.5	11.5
Number	453	14.5	11.5
Number	451	14.5	11.5
Number	7025	14.5	11.5
Number	5124	14.5	11.5
Number	6452	14.5	11.5

1° Change 1" casing Allow water flow...
 1° Out of strings to 1069'. No deviation measurements.
 7/8" Casing assembly to bit, 7/8" and 1/2" 7/8"
 3/4" U.C., change stabilizer. Run in to 1258'
 NO IMPROVEMENT IN DRILLING

TOUR REPORT

CONTRACTOR **G. P. DRUG RIG NO 14**

FIELD **WILCAT** WELL NAME _____ LSD _____ SEC _____ TWP _____ Rpt _____ W _____
 DRILLING DEEPENING COMPLETING **E. PORCUPINE 1-13**
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **FEB. 21 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR		END OF DAYLIGHT TOUR		END OF AFTERNOON TOUR	
STANDS D.P.	NO. 3	28752 FT	NO. 4	42425 FT	NO. 4	42425 FT
SINGLE D.P.	NO.		NO. 4	38625 FT	NO. 1	3182 FT
X-OVER SUB O.D.						
OTHER O.D.						
DRILL COLLARS 7 O.D.	18	55891 FT		55891 FT	18	55891 FT
DRILL COLLARS 7 3/4 O.D.	NO. 2	3860 FT	NO.	3860 FT	NO. 2	3860 FT
REAMER #90A9 O.D.	KIND NUC BIT	538 FT	KIND	538 FT	KIND B.P. Sub-	568 FT
STABILIZER #A58 O.D.	KIND BLAT	460 FT	KIND	460 FT	KIND	460 FT
#9028 STABILIZER O.D.	KIND (CUSHION)	569 FT	KIND	569 FT	KIND	569 FT
BUMPER SUB						
BIT OR CORE BARREL				43 FT		102653 FT
TOTAL D.P. & TOOLS		90070 FT		99557 FT		99557 FT
KELLY DOWN (BELOW R.B.)		4205 FT		4205 FT	38.50	4205 FT
DEPTH OF TOOLS		94275 FT		103756 FT		103756 FT
TOUR	MORNING TOUR		DAYLIGHT TOUR		AFTERNOON TOUR	
DEPTH END OF TOUR	942 FEET		1037 FEET		1065 FEET	
DEPTH START OF TOUR	825 FEET		242 FEET		1038 FEET	
FOOTAGE DRILLED	117 FEET		95 FEET		39 FEET	

DAY WORK	HOURS						HOURS					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.	1	50	50	50	50	50	50	50	50	50	50	50
ROTARY SPEED R.P.M.		60	60	60	60	98	98	98			7080	70-80
WEIGHT ON BIT M lbs.		10	10	8	8	8	8	8	8	8	8-10	8-10
MUD WEIGHT lb/gal		8.5	8.5	8.5	8.5	8.5	8.7	8.8			8-6	8-6
VISCOSITY sec/qt		35	35	35	33	35	35	36			35	36
W.L.F.C. c.c./32nd						14.4					14.4	14.0
p.H.						12.5	9.0				9.2	9.2
MUD LEVEL IN TANKS Ft. Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FT. IN	BIT CONDITION
5	8 3/4	DH975	SMITH SDT	3-9	1274	825	1037	212	2-1/2
6	8 3/4	28078	HTC-XIG	3-9	7 1/4	1037	1065	28	1N.

CORE No	No	ST No	FROM	TO	MUD ENGINEER'S REPORT			
					Time	8:30 P.M.	AK	
					Mud Wt	8.6	Int. Gel 5/5	
					Visc	34	W.L.F.C. 16.0	
					AV	10	11.0	
					P.V	5.5	N/A	
					Y.P	9.0	30/125	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	ARLO NAST	FANSAK.	G.H. Sodergren			
DERRICKMAN	G. Sodergren		J. Pedersen	TORCO	901	1°
HELPER	J. Schenk	VALQUANTE	R. Rogers		963	1°+
HELPER	A. Alex	RANGER	L. Nycolat.		1127	1°+
HELPER	R. Cox	KING	L. Cherpasnik.		1059	
FIREMAN						
TOOL PUSHER						

TO: **BI-CARB KELZAN GEL**
Gel (more tests)
KELZAN GEL
CAUSTIC DOWICIDE

DESIGNER: **J**
TIME DEPTH
11:00 AM 965
1:00 PM 990
3:00 1025

KIND
None Bit
None Bit
BLAVE
GLADE
CUSHION
10' D.C.
28' D.C.

None Flow

SOBC WM E. PORCUPINE YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
1971	Kind	Amount		
TOUR 1			12 ⁰⁰ 12 ¹⁵	RIG SERVICE
82 FT.	BI-CARB	200	12 ¹⁵ 1 ⁰⁰	RUN IN W/ BIT #5
82 FT.	KELZAN	100	1 ⁰⁰ 3 ¹⁵	DRILLING
	GEL	300	3 ¹⁵ 3 ⁴⁵	REPAIR UNION ON MUD MANIFOLD
			3 ⁴⁵ 5 ⁰⁰	DRILLING
91 FT.	GEL (AUGER FEEDS)	2500	5 ⁰⁰ 5 ³⁰	CIRC. WORK PIPE, TIGHT CONNECTION
60 FT.			5 ³⁰ 5 ⁴⁵	RUN SURVEY @ 901
68 FT.			5 ⁴⁵ 7 ⁰⁰	DRILLING
60 FT.	TOUR 2		7 ⁰⁰ 7 ³⁰	REPLACE TWO VALVE CAP GASKETS CLEAN OUT RUBBER
69 FT.	KELZAN	250	7 ³⁰ 8 ⁰⁰	DRILLING
	GEL	900	8 ⁰⁰ 8 ¹⁵	RIG SERVICE
	CAUSTIC	100	8 ¹⁵ 10 ³⁰	DRILLING
53 FT.	DOWICIDE B. 50		10 ³⁰ 11 ⁰⁰	Work pipe & Survey
			11 ⁰⁰ 3 ¹⁵	Drilling
			3 ¹⁵ 3 ⁴⁵	Work pipe & Survey
			3 ⁴⁵ 4 ⁰⁰	Work on pump
	TOUR 3		4 ⁰⁰ 4 ³⁰	Circ Hole Mix Mud.
			4 ³⁰ 6 ³⁰	Work Tight Hole - Couldn't Come Up.
			6 ³⁰ 7 ³⁰	Service Rig - Ch. B.O.P.'s Motor Shut Off.
			7 ⁰⁰ 8 ⁴⁵	Tripping - Changing Reamers & Bit.
			8 ⁴⁵ 12 ⁰⁰	Drilling.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DESILTER DATA

TIME	DEPTH	SHAKER WT	UNDERFLOW	OVERFLOW	TIME FOR 1 GAL
11:00 AM	965	8.7	13.8	8.5	6' 45"
1:00 PM	990	8.7	12.8	8.6	3' 17"
3:00	1025	8.8	10.5	8.7	70"

Notes: Drilled with STAFF
 HOUSING (WITH BIT REAMER)
 7 3/4" x 10' D.C., BLADE STABILIZER
 7 3/4" x 30' D.C., CUSHION
 STABILIZER) FROM 925' - 911'
 WITH 10,000 # WT. DEJ. L.
 (LACKED OFF TO 10' B, 200 #
 TO 1027', THE SURFACE ANGLE
 VERY VERY SLIGHTLY.

REAMER + STABILIZER DATA

KIND	#	HOURS TODAY	CUM. HOURS
NEAR BIT	9049	12 18 1/4	12 1/4
NEAR BIT	9830	—	—
BLADE	458	15 1/2	15 1/2
BLADE	451	—	—
CUSHION	9028	15 1/2	15 1/2
10' D.C.	51174	15 1/2	15 1/2
28' D.C.	66452	15 1/2	15 1/2

TRIPPER, LAST DOWN NEAR
 BIT REAMER. DRILLING AHEAD
 WITH 10,000 #

Note: HALL JO WATER: Ca⁺⁺ 130 ppm

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR *GR*

RIG NO *14*

FIELD _____ WELL NAME _____
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

LSD _____ SEC _____ TWP _____
 FOR 24 HOURS ENDING 12 MIDNIGHT *197*

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS .. D.P.	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT	NO	FT
SINGLE .. D.P.	NO	FT	NO	FT								
X-OVER SUB .. O.D.		FT		FT		FT		FT		FT		FT
OTHER .. O.D.		FT		FT		FT		FT		FT		FT
DRILL COLLARS .. O.D.		FT		FT		FT		FT		FT		FT
DRILL COLLARS .. O.D.	NO	FT	NO	FT		FT	NO	FT	NO	FT		FT
REAMER .. O.D.	KIND	FT	KIND	FT		FT	KIND	FT	KIND	FT		FT
STABILIZER .. O.D.	KIND	FT	KIND	FT		FT	KIND	FT	KIND	FT		FT
JARS	KIND	FT	KIND	FT		FT	KIND	FT	KIND	FT		FT
BUMPER SUB	KIND	FT	KIND	FT		FT	KIND	FT	KIND	FT		FT
BIT OR CORE BARREL		FT		FT		FT		FT		FT		FT
TOTAL D.P. & TOOLS		FT		FT		FT		FT		FT		FT
KELLY DOWN (BELOW R.B.)		FT		FT		FT		FT		FT		FT
DEPTH OF TOOLS		FT		FT		FT		FT		FT		FT

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR				FEET				FEET				FEET
DEPTH START OF TOUR				FEET				FEET				FEET
FOOTAGE DRILLED				FEET				FEET				FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP <i>s.p.m. p.s.i.</i>	/											
ROTARY SPEED <i>R.P.M.</i>												
WEIGHT ON BIT <i>M lbs.</i>												
MUD WEIGHT <i>lb/gal</i>												
VISCOSITY <i>sec.qt</i>												
W.L./F.C. <i>cc/32nd</i>	/											
p.H.												
MUD LEVEL IN TANKS <i>Ft. Ins.</i>												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET HR	BIT CONDITION

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.H.P.	ps	TEMP	ps	Time	AM
FROM		ISI	mins	F.H.P.	ps	F.P.P.	ps	Mud Wt	PM
TO		VO	mins	I.S.I.P.	ps	G.T.S.	ps	Visc	
Recovery		F.S.I.	mins	F.S.I.P.	ps	F.T.S.	ps	AV	
HOURS		RECOVERY						P.V.	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reason
DRILLER						
DERRICKMAN						
HELPER						
HELPER						
HELPER						
FIREMAN						
TOOL PUSHER						

OTHER HOURLY OPERATING DETAIL
WORK DONE

MATERIALS CHEMICALS ADDED		From	To	
Kind	Amount			
TOUR 1				<p>★ GRIND WHEEL # 9028</p>
TOUR 2				<p>★ GRIND WHEEL # 9030</p> <p>IS 1200 W/ LIGHT MODIFICATION CH. 1468 AS</p>
TOUR 3				<p>★ CEMENT # 451 AND # 455</p>

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

★ GRIND WHEEL STABILIZER # 9028

★ RENTAL DOME COLLAR # 51124

★ RENTAL DOME COLLAR # 66452

SIGNATURE COMPANY ENGINEER

SOBC WM E PORCUPINE YT 1-13

1971
 DON TOUR
 FT.
 FT.
 FT.
 FT.
 860 FT.
 FT.
 538 FT.
 460 FT.
 FT.
 569 FT.
 FT.
 FT.
 FT.
 FT.
 FT.
 N TOUR
 5 FEET
 4 FEET
 1 FEET
 HOURS
 00 P.M. 12.00 P.M.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL
Kind	Amount			WORK DONE
TOUR 1		12 ⁰⁰	12 ¹⁵	RIG SERVICE
		12 ¹⁵	1 ¹⁵	FINISH HEADING UP & CLEAN UP FLOOR
		1 ¹⁵	2 ⁰⁰	RUN IN W/ 12 1/4" BIT
		2 ⁰⁰		COULD NOT PULL KELLY OUT OF SOCK, UNTHAW SAME, PULLED SOCK & KELLY OUT, UNTHAW SAME, LAID
			6 ¹⁵	SOCK DOWN
TOUR 2		6 ¹⁵	6 ³⁰	CIRC. HOLE W/ FRESH WATER
		6 ³⁰	7 ³⁰	RIG UP TO TEST RAMS
		7 ³⁰	8 ⁰⁰	TESTING RAMS (PIPE)
		8 ⁰⁰		Pressure: TEST PIPE RAMS, HYDRIL, WING VALVES, MANIFOLD + VALVES, FLARE LINE + VALVES +
			2 ⁰⁰	FOR ALL LEAKS
		2 ⁰⁰	3 ⁰⁰	CIRC. FUL OUT OF HOLE W/ WATER
		3 ⁰⁰	4 ⁰¹	DRILL OUT PLUG + CUT
TOUR 3		4 ⁰⁰	5 ⁰⁰	DRILL CEMENT
		5 ⁰⁰	6 ³⁰	Reposition Kelly SOCK
		6 ³⁰	6 ⁴⁵	DRILL CEMENT
		6 ⁴⁵	7 ³⁰	DRILL NEW HOLE
		7 ³⁰	8 ³⁰	RE-DRILL OUT CSG SIZE (W/ 1/2" TIGHT)
		8 ³⁰	9 ¹⁵	HOIST BIT # 4, LAY DOWN BELL SUB
		9 ¹⁵		PICK UP REAMERS, STABILIZERS, 7 3/4" COLLARS AND START INTO HOLE W/ BIT # 5
			12 ⁰⁰	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Pressure tested pipe rams to 1700 psi. for 30 min. lost 40 psi. test satis.

Pressure tested hydril against: (INDIVIDUALLY) FOR 15 MIN

INNER WING VALVES	} EACH TEST TO APPROX. 1800 psi. PRESSURE DROP NO MORE THAN 25 psi IN ANY CASE AFTER REPAIRS. MANIFOLD LEAKS REQUIRED SOME 4 HOURS TO REPAIR.
OUTER WING VALVES	
MANIFOLD TO CHOKES	
MANIFOLD TO CENTER VALVES	
MANIFOLD TO FLARE LINE VALVES	
KELLY COCK	

Pressure tested flare line to 500 psi for 10 min. 0 psi press. drop.

Checked all silt-logs satisfactorily.

Run in w/ 12 1/4" bit. Drilled cement + side down to 825.

Hoisted, made up stiff assemblies as follows:

- BIT
- NEAR BIT REAMER
- 10' - 7 3/4" D.C.
- BLADE STABILIZER
- 30' - 7 3/4" D.C.
- CUSHION STABILIZER
- 7" D.C.'s

NOTE: BEGAN MAKING NEW HOLE AT 6:45 PM AFTER 1 1/2 HRS. 25 MIN SINCE C.I.P.

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. DRILLING** RIG NO **14**

FIELD **WILDCAT** WELL NAME **E. PORCUPINE 1-13** LSD SEC TWP Rge W
 DRILLING DEEPENING COMPLETING **FOR 24 HOURS ENDING 12 MIDNIGHT FEB. 19 1971**
 REDRILLING ABANDONING REWORKING

DRILLING ASSEMBLY		END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS	D.P.	NO 2	9458	FT	NO 2	9458	FT	NO 2	9458	FT
SINGLE	D.P.	NO 1	6233	FT	NO 1	6233	FT	NO 2	6233	FT
X-OVER SUB	O.D.			FT			FT			FT
OTHER	O.D.			FT			FT			FT
DRILL COLLARS	7 O.D.	18	55891	FT	18	55891	FT	18	55891	FT
DRILL COLLARS	O.D.	NO.		FT	NO		FT	NO		FT
REAMER	O.D.	KIND		FT	KIND		FT	KIND		FT
STABILIZER	O.D.	KIND		FT	KIND		FT	KIND		FT
JARS		KIND		FT	KIND		FT	KIND		FT
BUMPER SUB.		KIND		FT	KIND		FT	KIND		FT
BIT OR CORE BARREL				FT			FT			FT
TOTAL D.P. & TOOLS			71582	FT		71582	FT		71582	FT
KELLY DOWN (BELOW R.B.)			4100	FT		4100	FT		4100	FT
DEPTH OF TOOLS			75682	FT		75682	FT		75682	FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	804 FEET	804 FEET	804 FEET
DEPTH START OF TOUR	004 FEET	304 FEET	04 FEET
FOOTAGE DRILLED	0 FEET	0 FEET	0 FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.												
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	IHP	psi	IFP	psi	Time	AM P.V.I
FROM		ISI	mins	FHP	psi	FFP	psi	Mud Wt	Int. Gel 10 Min. Gr.
TO		VO	mins	ISIP	psi	GTS	psi	Visc	WLF C
Recovery		FSI	mins	FSIP	psi	FTS	psi	AV	p.H.
HOURS		RECOVERY						PV	Solids

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER		FRASER	G.H. Soderstrom			
DERRICKMAN		FRASER	J. Pedersen			
HELPER		VALIQUITE	R. Rogers			
HELPER		RANDER	L. Nocolat			
HELPER		RIFE	L. Charpenok			
FIREMAN						
TOOL PUSHER						

TOUR 1
TOUR 2
TOUR 3
INSIDE
INSIDE
INSIDE
ON KILN
CUTTING
DRILL
13013
40000
164000
18

SOBC WM E. PORCUPINE ~~IT~~ YT I-13

OTHER HOURLY OPERATING DETAIL
WORK DONE

1971

ON TOUR
458 FT.
233 FT.
FT.
FT.
891 FT.
FT.
FT.
582 FT.
100 FT.
682 FT.
TOUR
4 FEET
4 FEET
0 FEET
HOURS
10 PM
12 00 P.M.

Kind	Amount	From	To	WORK DONE
		12 ⁰⁰	12 ¹⁵	RIG SERVICE
		12 ¹⁵	12 ⁴⁵	HOIST PIPE
		12 ⁴⁵		CUT OFF CSG, SCREW ON BOWL
			8 ⁰⁰	SET UP SHAFFER, SPOOL, HYDRIL
TOUR 2				
		8 AM	4 PM	Nipple up B.O.P's
TOUR 3				
		4 ⁰⁰	7 ³⁰	Finish Belting B.O.P's Together & Install Line To B.O.P. Manifolds. Pressuring Up On Blind Rams Rams Did Not Want To Seal. Set Up Pressure Control On Accum Pump. Worked Hrs. Overtiring Rigging Up Desitter Unit & B.O.P. Lines Cleaning.
		7 ³⁰		
			12 ⁰⁰	

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Up After Nipple
Up B.O.P's

- INSIDE DIAMETER OF - HYDRIL 13 1/16
- SHAFER 13 1/16
- SPOOL 13 1/16

INSTALLED 13 3/8" x 12" - 900 SERIES FEMUR TROMBON SCREW ON BOWL GRAB CSG SPOOL

INSTALLED BOP STACK CONSISTING OF, FIRST BOTTOM:

- 1 - 12" x 900 SERIES SHAFER DOUBLE GEAR PROVISION (1011 - 1012)
- 1 - 12" x 900 SERIES SPACER SPOOL
- 1 - 12" x 900 SERIES HYDRIL "GK" TAG - TYPE MANIFOLD

BOP STACK DRIVEN WITH DOUBLE 3" x 900 SERIES FLANGE STEEL JAWES ON KILL LINE AND BLOW - DOWN LINE AND DOUBLE 1" x 900 SERIES FLANGE STEEL JAWES ON CASING BOWL BLOW DOWN LINE MEMBER TO BOPED MANIFOLD W/ 3" MAIN RUN AND 2" BRANCH RUN

BOP'S EXISTED HYDRAULICALLY FROM ACCUMULATOR HOUSE TO BE SET AND ACCUM. AND MAXIMUM NITROGEN DENSITY. IN SET OF THE CONTROL AND UPGRADE OPERATE CONTROLS IN ACCUM. HOUSE RAN ACCUMULATOR HAS TWO SETS OF WORKING HOLES WHEELS

PRESSURE TESTED BLOW RAMS ON LT90 IN SET OF 3" AND PRESSURE TEST WAS SATISFACTORY. (BEFORE A BLOW TEST WORKING ON BLOWER SAYS)

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **G.P. ORLG.** RIG NO **17**

FIELD **WILCOAT**

WELL NAME

LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

E. PORCUPINE 1-13
 FOR 24 HOURS ENDING 12 MIDNIGHT **FEB. 18**

1971

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P.	NO 1	9458	FT.	NO 1	9458	FT.	NO 1	9458	FT.	NO 1	9458	FT.
SINGLE	D.P.	NO 2	6233	FT.	NO 2	6233	FT.	NO 2	6233	FT.	NO 2	6233	FT.
X-OVER SUB	O.D.			FT.			FT.			FT.			FT.
OTHER	O.D.			FT.			FT.			FT.			FT.
DRILL COLLARS	O.D.		55891	FT.	14	55891	FT.	18	55891	FT.		55891	FT.
DRILL COLLARS	O.D.	NO.		FT.	NO		FT.	NO		FT.			FT.
REAMER	O.D.	KIND		FT.	KIND		FT.	KIND		FT.			FT.
STABILIZER	O.D.	KIND		FT.	KIND		FT.	KIND		FT.			FT.
JARS		KIND		FT.	KIND		FT.	KIND		FT.			FT.
BUMPER SUB.		KIND		FT.	KIND		FT.	KIND		FT.			FT.
BIT OR CORE BARREL				FT.			FT.			FT.			FT.
TOTAL D.P. & TOOLS			71582	FT.			FT.			FT.		71582	FT.
KELLY DOWN (BELOW R.B.)			4100	FT.		4100	FT.			FT.		4100	FT.
DEPTH OF TOOLS			75682	FT.		75682	FT.			FT.		75682	FT.

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR			
DEPTH START OF TOUR			
FOOTAGE DRILLED			

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	/											
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.	/											
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	IHP	ps.i	I FP	ps.i	Time	AM P.M.	Aik
FROM		I.S.I	mins.	FHP	ps.i	F FP	ps.i	Mud Wt		10 Min. Gr.
TO		V.O	mins	ISIP	ps.i	G.T.S.	ps.i	Visc		W.L.F.C.
Recovery		F.S.I	mins	F.S.I.P	ps.i	F.T.S.	ps.i	A.V		p.H.
HOURS		RECOVERY						P.V		Sound

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	A. NAST	T. KASKER	G. H. Sodergren			
DERRICKMAN	J. PETERSON	T. KASKER	J. Pedersen			
HELPER	R. ROGERS	VALQUANTE	R. Rogers			
HELPER	J. SCHENK	RANDAK	L. Nycolat			
HELPER	A. WHEX	RIMK	Lo. Charpinski			
FIREMAN						
TOOL PUSHER						

int. CHEMICAL Kind
 T-3
 SUBPAC
 (checked)
 1-1
 1-1
 1-1
 1-1
 Used
 No 1
 1-OS
 2-OS
 3-UC
 1-12 1/2
 1-12 1/2
 1-12 1/2
 1-12 1/2
 1-12 1/2
 1-12 1/2

SOBC E. PORCUPINE # 1-13

OTHER HOURLY OPERATING DETAIL WORK DONE

1971
 158 FT
 233 FT
 891 FT
 582 FT
 100 FT
 682 FT
 TOUR
 FEET
 FEET
 FEET
 HOURS
 P.M. 12:00 P.M.

MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	8 ⁰⁰	CIRC. CSG. W/ HOT WATER
TOUR 2		8 ⁰⁰	4 ⁰⁰	CIRC. CSG. W/ HOT WATER.
TOUR 3		4 ⁰⁰	12 ⁰⁰	Circ. Csg. w/ Hot Water.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Ground Circulation w/ water. Temp 70° - 60°F

SURFACE BIT RECORD

RECOVERED

1 - 17 1/2" OSC-1G	NEW # XD 632	1 - 12 1/4" OSC-3 # 26981	Dull
1 - 17 1/2" OSC-3	NEW # BK 550		
1 - 17 1/2" OSC-1G	Dull # X11 329	1 - 17 1/4" OSC-2 # W868	Dull
1 - 17 1/2" OSC-3	Dull # BK 551		

USED AS FOLLOWS:

No.	TYPE	SERIAL	NEW OR RE-USE	FROM	TO	HOUSING	HOUSING
1	OSC-1G	XD 632	NEW	24	331	67	25
2	OSC-1G	X11 329	RE-USE	331	162	329	3
3	OSC-1G	XD 632	RE-USE	162	504	164	4

FOR TRANSFER:

- 1 - 17 1/2" OSC-3 # BK 550 NEW
- 1 - 17 1/2" OSC-1G # XD 632 RE-USE
- 1 - 17 1/2" OSC-1G # X11 329 "
- 1 - 17 1/2" OSC-3 # BK 551 Dull
- 1 - 17 1/4" OSC-3 # 26981 Dull ON 17 1/2" OSC-2 # W868
- 1 - 12 1/4" OSC-2 # W868 RE-USE

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

G.P.

RIG NO

14

FIELD WILDCAT WELL NAME

LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

E. PORCUPINE I - 13

REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT

FEB. 17

1971

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR						
STANDS	D.P.	NO. 1			9458	FT.	NO. 1			9458	FT.	NO. 1			9458	FT.
SINGLE	D.P.	NO. 6			6233	FT.	NO. 2			6233	FT.	NO. 2			6233	FT.
X-OVER SUB	O.D.					FT.					FT.					FT.
OTHER	O.D.					FT.					FT.					FT.
DRILL COLLARS	O.D.	18			55891	FT.	18			55891	FT.	18			55891	FT.
DRILL COLLARS	O.D.	NO.				FT.	NO.				FT.	NO.				FT.
REAMER	O.D.	KIND				FT.	KIND				FT.	KIND				FT.
STABILIZER	O.D.	KIND				FT.	KIND				FT.	KIND				FT.
JARS		KIND				FT.	KIND				FT.	KIND				FT.
BUMPER SUB.		KIND				FT.	KIND				FT.	KIND				FT.
BIT OR CORE BARREL						FT.					FT.					FT.
TOTAL D.P. & TOOLS					71582	FT.				71582	FT.				71582	FT.
KELLY DOWN (BELOW R.B.)					41	FT.				41	FT.				41	FT.
DEPTH OF TOOLS					75682	FT.				75682	FT.				75682	FT.

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR				
DEPTH END OF TOUR													
DEPTH START OF TOUR													
FOOTAGE DRILLED													

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.												
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT./HR.	BIT CONDITION

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT						
TYPE			PREFLOW	mins	I.H.P.	p.s.i.	F.F.P.	p.s.i.	Time	A.M.	Alk
FROM			I.S.I.	mins.	F.H.P.	p.s.i.	F.F.P.	p.s.i.	Mud Wt.		Int. Gel
TO			V.O.	mins.	I.S.I.P.	p.s.i.	G.T.S.	p.s.i.	Visc.		W.L.F.C.
Recovery			F.S.I.	mins.	F.S.I.P.	p.s.i.	F.T.S.	p.s.i.	A.V.		p.H.
HOURS			RECOVERY						P.V.		Sand

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
	Kind	Depth	Reading			
DRILLER	A. NAST	G.H. Sodergren	FRASEK			
DERRICKMAN	L. ABRAHAM	J. Petersen	FRASEK			
HELPER	J. SCHENK	R. Rogers	VALQUINTE			
HELPER	A. ALEX	L. Nycholat.	FRANCK			
HELPER	L. NYCHOLAT	L. Cherapinski	RIME			
FIREMAN						
TOOL PUSHER						

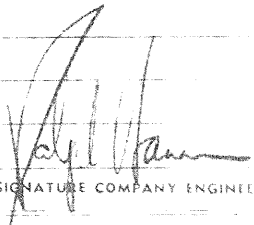
SOBC W M E. PORCUPINE 1-E

1971		MATERIALS and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
OUR	FT.	Kind	Amount			
58	FT.	TOUR 1		12 ⁰⁰	8 ⁰⁰	CIRC. INSIDE SURFACE C.S.G. W/ HOT WATER
53	FT.					
	FT.					
	FT.					
11	FT.					
	FT.					
	FT.	TOUR 2		8 ⁰⁰	11 ⁰⁰	CIRC. INSIDE C.S.G. W/ HOT WATER.
	FT.					
	FT.					
2	FT.					
	FT.					
52	FT.	TOUR 3		4 ⁰⁰	12 ⁰⁰	Circ Surface Csg. w/ Hot Water.
	FT.					
	FEET					
	FEET					
	FEET					
	HOURS					
	12.00 P.M.					

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

CIRCULATING WATER NATURAL INSIDE CASING — RETURN TEMP
70° — 90° F

PROCEEDING WITH PRELIMINARIES TO RIGGING UP.


SIGNATURE COMPANY ENGINEER

TOUR REPORT

FIELD **WILDCAT** WELL NAME **E. PORCUPINE T-15** CONTRACTOR **GP** RIG NO **14**
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING
 LSD SEC TWP Rge W
 FOR 24 HOURS ENDING 12 MIDNIGHT **FEB 16 1971**

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
SINGLE	D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
X-OVER SUB	O.D.		FT.		FT.		FT.		FT.		FT.		FT.
OTHER	O.D.		FT.		FT.		FT.		FT.		FT.		FT.
DRILL COLLARS	O.D.		FT.		FT.		FT.		FT.	18	55891		FT.
DRILL COLLARS	O.D.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
REAMER	O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
STABILIZER	O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
JARS		KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BUMPER SUB.		KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BIT OR CORE BARREL			FT.		FT.		FT.		FT.		FT.		FT.
TOTAL D.P. & TOOLS			FT.		FT.		FT.		FT.		FT.		FT.
KELLY DOWN (BELOW R.B.)			FT.		FT.		FT.		FT.		FT.		FT.
DEPTH OF TOOLS			FT.		FT.		FT.		FT.		FT.		FT.

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR				FEET				FEET				FEET
DEPTH START OF TOUR				FEET				FEET				FEET
FOOTAGE DRILLED				FEET				FEET				FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	/											
ROTARY SPEED	/											
WEIGHT ON BIT	/											
MUD WEIGHT	/											
VISCOSITY	/											
W.L./F.C.	/											
p.H.	/											
MUD LEVEL IN TANKS	/											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL FEET	FT. HR.	BIT CONDITION

CORE No.	No.	DST No.	FROM				TO				MUD ENGINEER'S REPORT	
			PREFLOW	mins	IHP	psi	FFP	psi	Time	AM PM	AK	Int. Gel
FROM			ISI	mins	FHP	psi	FFP	psi	Mud Wt.		10 Min Gel	
TO			VO	mins	ISIP	psi	GTS	psi	Visc		W.L.F.C.	
Recovery			FSI	mins	FSIP	psi	F.T.S.	psi	A.V.		p.H.	
HOURS			RECOVERY						P.V.		Solid	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	JIM POTERSEN	ARLO HAST	FRASER			
DERRICKMAN	L. KAPLANIK	LAURIE AARHAM	FRASER			
HELPER	D. COLLINS	JAMES SCHENK	VALIGATE			
HELPER	K. JONSON	JIM ALEX	KANOR			
HELPER	J. HACKNAG	ALBERT	HIMM			
FIREMAN						
TOOL PUSHER						

SURFACE CA
 RNU
 CAS
 STUB DETAIL
 1-13 3/8"
 1-13 1/2"
 1-13 3/8"
 74-13 1/2"
 LA
 CEMENTING DE
 CEMENTED
 CEMENT P
 UNIT (DENT)
 Picked
 73 MID F
 120 psi WA
 1200 psi 13
 Feb 16/71
 CELLAR. WA
 ROTARY TA

SORC WM E PIPELINE I-13

CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971		12:00	12:45	Run down 2' to well casing
TOUR		12:45	1:00	RIG SERVICE
FT.		1:00	8:00	RIG TO RUN CASING
FT.		2:00	8:00	Run 13 3/8" CASING
FT.				
FT.				
71				
FT.				
FT.		8:00	8:30	HEAD UP TO CIRC CSG.
FT.		8:30	9:30	CLEAN 15 FT. TO BTM.
FT.		9:30	11:00	CIRC CSG.
FT.		11:00	11:30	INSTALL CEMENTING HEAD
FT.		11:30		CEMENTING
FT.				
FT.			4:00	WASH OUT CONDUCTOR PIPE, FLOW LINE, DIG CELLAR, CLEAN MUD TANKS
TOUR 3				
FT.		4:00		PUT CSG CLAMP ON & BLOCK UP
FT.				WELD ON FLOW NIPPLE & HOOK UP FLOW LINE
FT.				CUT OFF CSG & LAY FLOW
FT.				TAKE OFF CEMENTING HEAD OF CSG
FT.				FINISH CLEANING TANKS & FILL W/ W.P.
FT.			11:00	CLEAN OFF FLOOR, TAKE D/STABING B.
FT.			12:00	RUN IN HOLE OPEN END.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

SURFACE CASING DETAILS

RUN 25 JTS (813.77) OF 13 3/8" - 50.5" - J55 - 8RD - NOW SALS CASING AND LANDED AT 798.86. STRING WAS EQUIPPED WITH DAVIS

STRING DETAILS

1 - 13 3/8" DAVIS FLOAT SHOE	1.70
1 - JT 13 3/8" CASING	32.64
1 - 13 3/8" DAVIS FLOAT COLLAR	1.45
24 - JTS 13 3/8" CASING	777.98
TOTAL STRING	813.77
LESS ABOVE K.B.	14.91
LANDED	798.86

FLOAT SHOE, DAVIS FLOAT COLLAR AND THREE CENTRIZERS (ON JOINTS 1, 2 + 11). FLOAT SHOE, FLOAT COLLAR AND THREE BOTTOM JOINTS WERE WELDED TOGETHER WITH ~~ARC WELDER~~ WITH ARC WELDER (SPOT - WELDED INCLUDING BASE OF COLLAR) TO FORM A SOLID UNIT

CEMENTING DETAILS

CEMENTED 813.77' OF 13 3/8" CASING AT 798.86' WITH 1320 SERVITEI CONST.

CEMENT PLUS 3% CaCl₂ USING BJ SERVICES 800 SERIAL MACE-MERK SKIW UNIT (IDENTICAL UNIT STANDING BY AND MEANWHILE PUMP & WATER TO WORKING UNIT).

PREPARED GRUNT WITH 25 BW WATER. MIXED CEMENT TO A 15.6 # SLURRY IN

73 MIN FROM 11:37 AM TO 12:50 PM. DISPLACED CEMENT WITH PLUG AND 120 bbl WATER IN 25 MIN FROM 12:55 PM TO 1:20 PM. BUMPED PLUG WITH 1200 PSI, BLEED BACK TO ZERO PSI, FLOATS HELD. CEMENT IN PLACE 1:20 PM

FEB 16/71. CUT OFF CONDUCTOR PIPE, LANDED CASING IN CASING CLAMP IN CELLAR. WELDED FLOW NIPPLE ON CASING AND CUT OFF CASING BELOW ROTARY TABLE.

SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP.** RIG NO **14**

FIELD **Wild Cat** WELL NAME LSD SEC TWP Rge W
 DRILLING DEEPENING COMPLETING **EAST PORCUPINE I-13**
 REDRILLING ABANDONING REWORKING **FEB 15 1971**
 FOR 24 HOURS ENDING 12 MIDNIGHT

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS " D.P. NO. 1			9458 FT	NO		9458 FT	NO		9458 FT
SINGLE " D.P. NO. 2			6233 FT	NO.		6233 FT	NO		6233 FT
X-OVER SUB " 7 1/4 O.D.			464 FT			464 FT			464 FT
OTHE: " 6 3/4 O.D.			154 FT			154 FT			154 FT
DRILL COLLARS " 7 O.D.			55891 FT			55891 FT			55891 FT
DRILL COLLARS " 10 O.D. NO. KIND			6042 FT	NO		6042 FT	NO		6042 FT
REAMER " O.D. KIND									
STABILIZER " 9 O.D. KIND			560 FT	KIND		560 FT	KIND		560 FT
JARS KIND									
BUMPER SUB. KIND									
BIT OR CORE BARREL									
TOTAL D.P. & TOOLS			77802 FT			77802 FT			77802 FT
KELLY DOWN (BELOW R.B.)			3700 FT			3700 FT			
DEPTH OF TOOLS									

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	804 FEET	804 FEET	
DEPTH START OF TOUR	804 FEET	804 FEET	
FOOTAGE DRILLED			

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.	/	/	/	/	/	/	/	/	/	/	/	/
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs.												
MUD WEIGHT lb/gal												
VISCOSITY sec/qt												
W.L./F.C. c.c./32nd	/	/	/	/	/	/	/	/	/	/	/	/
p.H.												
MUD LEVEL IN TANKS Ft. Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT			
TYPE		PREFLOW	mins. IHP	p.s.i. IFP	p.s.i. Time	AM	PM	Air
FROM		ISI	mins. FHP	p.s.i. FFP	p.s.i. Mud Wt.	Ins. Gr.	10 Min. Gr.	
TO		V.O.	mins. ISIP	p.s.i. GTS	p.s.i. Visc	W.L.F.C.		
Recovery		FSI	mins. FSIP	p.s.i. FTS	p.s.i. A.V.	B.M.		
HOURS		RECOVERY			P.V.	Soil		

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Y.P.	DEVIATION RECORD		
DRILLER	JAMES PETERSEN	ARLO HAST	F. FRASER		Kind	Depth	Reading
DERRICKMAN	LEON KAPLOWITZ	LAURIE ABRAHAM	F. FRASER				
HELPER	Don Collins	JAMES SCHEAK	YALIQUELIE				
HELPER	F. JORDAN	ALBERT ALEX	BUNGER				
HELPER	J. WLOCKHAK	JIM	BUNG				
FIREMAN							
TOOL PUSHER							

TO-3
 CR1 =

Note

LOGS

IES
 BIC
 HIC

SOBC WM E PORCUPINE I-13

MATERIALS CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
1971		12 ⁰⁰	7 ²⁰	Logging. K's Out Loggers
TOUR 1		7 ²⁰		
58 FT				
33 FT				
64 FT				
24 FT				
91 FT				
49 FT				
TOUR 2				
60 FT	8 ⁰⁰	8 ¹⁵		RIG SERVICE
FT	8 ¹⁵	11 ⁰⁰		TEAR OUT SLOW WIRE
FT				HEAD, LOAD OUT SAME
FT	11 ⁰⁰	1 ³⁰		CHANGE CONDUCTOR PIPES w/WELDER
802 FT	1 ³⁰	2 ³⁰		HOOK UP FLOW LINE
FT	2 ³⁰	4 ⁰⁰		RUN IN HOLE w/ BIT
FT				
TOUR 3				
OUR	GEL #	4 ⁰⁰	5 ¹⁵	THAW KELLY OUT OF RAT HOLE
FEET		5 ¹⁵	5 ³⁰	RIG SERVICE
FEET		5 ³⁰	6 ³⁰	CLEAN 20' OF HILL TO BTM
FEET		6 ³⁰		CINE & WORK PIPE FOR C.S.G.
HOURS		10 ⁰⁰	10 ⁰⁰	MIX GEL, BLOW KELLY
P.M. 12 00 P.M.		11 ³⁰	11 ³⁰	HOIST TO RUN C.S.G.
		11 ³⁰	12 ⁰⁰	LAY D/10" COLLARS

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Note. GR. BLVD : 1645.0
 KR - GR. : 17.90
 FILL : 3.50
KB BLVD : 1666.40

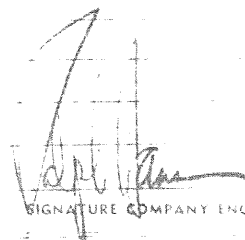
LOGS Run:

LOG

DEPTH REACHED

INTERVAL (2" - 5")

IES	782	787-70
BHC Sonic w/G-R	788	779-70
MicroLOG COMPACT	788	786-70


 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP**

RIG NO **14**

FIELD **WILCOAT**

WELL NAME

LSD

SEC

TWP

Rge

W

DRILLING DEEPENING COMPLETING

REDRILLING ABANDONING REWORKING

EAST 13200' WIDE T-13

FEB 14

1971

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P.	NO. 1		9458	FT	NO		9458	FT	NO 1		9458	FT
SINGLE	D.P.	NO. 1		3128	FT	NO		3128	FT	NO 2		6233	FT
X-OVER SUB	O.D.			464	FT			464	FT			464	FT
OTHER	O.D.			154	FT			154	FT			154	FT
DRILL COLLARS	7 O.D.			55891	FT			55891	FT	18		55891	FT
DRILL COLLARS	10 O.D.	NO.		6042	FT	NO		6042	FT	NO		6042	FT
REAMER	O.D.	KIND			FT	KIND			FT	KIND			FT
STABILIZER	9 O.D.	KIND		560	FT	KIND		560	FT	KIND		560	FT
JARS		KIND			FT	KIND			FT	KIND			FT
BUMPER SUB.		KIND			FT	KIND			FT	KIND			FT
BIT OR CORE BARREL					FT				FT				FT
TOTAL D.P. & TOOLS				75697	FT			75697	FT			78802	FT
KELLY DOWN (BELOW R.B.)				4205	FT			4205	FT	1600		3700	FT
DEPTH OF TOOLS				79902	FT			79902	FT			80402	FT

TOUR	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR
DEPTH END OF TOUR	799 FEET	799 FEET	804 FEET
DEPTH START OF TOUR	799 FEET	799 FEET	799 FEET
FOOTAGE DRILLED	0 FEET	0 FEET	5 FEET

DAY WORK	HOURS						HOURS					
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP	/	/	/	/	/	/	/	/	/	/	/	/
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L.F.C.	/	/	/	/	/	/	/	/	/	/	/	/
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FEET	FT HR	BIT CONDITION
3	1 7/8		DSC-16J Ream	3-18	14 3/4	660	804	144	10	3-3-I

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT					
TYPE		PREFLOW	mins	I.H.P.	ps.	I.F.P.	ps.	Time	AM PM	AK
FROM		I.S.I	mins	F.H.P.	ps.	F.F.P.	ps.	Mud Wt		Int. Gel 10 Min. Gel
TO		V.O.	mins	I.S.I.P.	ps.	G.T.S.	ps.	Visc		W.L.F.C.
Recovery		F.S.I	mins	F.S.I.P.	ps.	F.T.S.	ps.	A.V.		p.H.
HOURS		RECOVERY						P.V.		Sand

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Y.P.
DRILLER	James P. Parkes	ARLO NOST	T. FRASER	
DERRICKMAN	LEON KARLWITZ	LARRY ARNOLD	FRASER	
HELPER	Don Cairns	JAMES SCHENK	VALQUETTE	
HELPER	F. J. JONSON	ALBERT ALEX	RANDY RIME	
HELPER	V. LACKWAG	JIM		
FIREMAN				
TOOL PUSHER				

TOUR 1
TOUR 2
TOUR 3

GEL CAUSTIC

55891
7" DRILL COLLAR

1.60
2.70
1.50
1.25

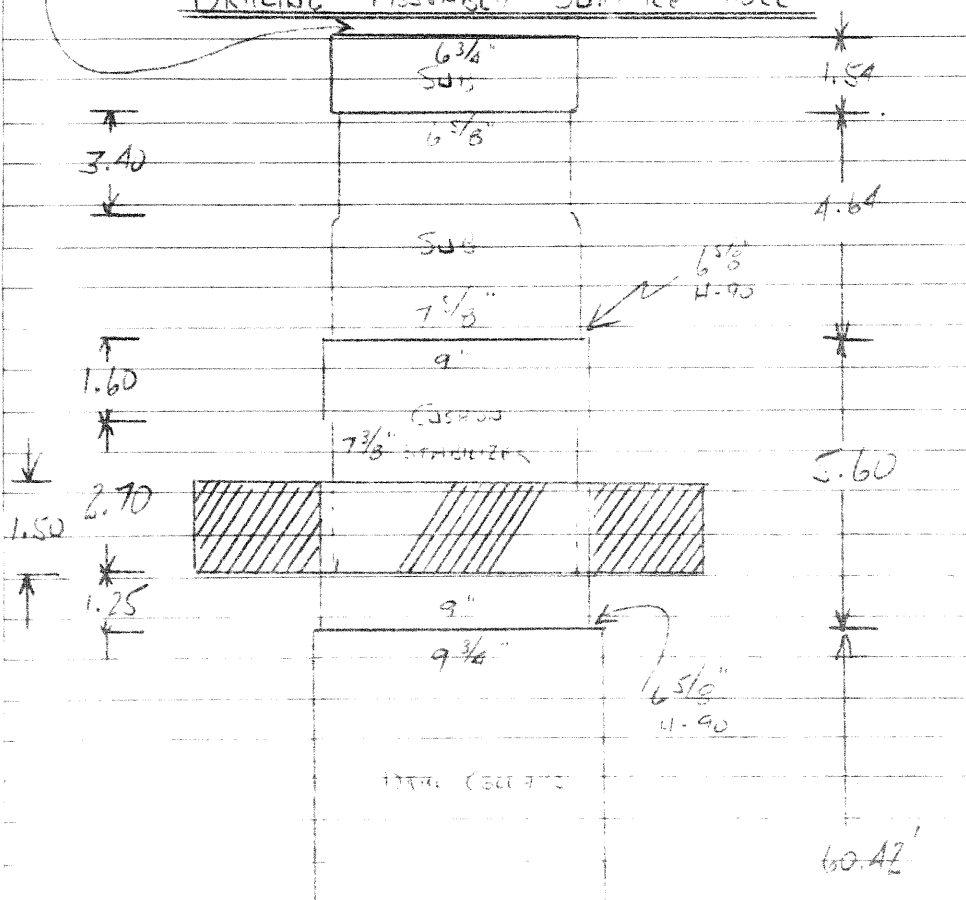
SOBC WM E. PORCUPINE I-13

MUD and CHEMICALS ADDED			From		To		OTHER HOURLY OPERATING DETAIL
OUR	Kind	Amount					WORK DONE
19 71			17 ⁰⁰	7 ⁰⁰			Mix MUD, Pump volume (3.2 gal. W.O. Water)
00			7 ⁰⁰	8 ⁰⁰			DRILLICE 1000 TO 1100
01	GEL	3300					
02	CAUSTIC	50					
03	SANDWST	25 SR					
04							
05							
06							
07							
08							
09							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
26							
27							
28							
29							
30							
31							
32							
33							
34							
35							
36							
37							
38							
39							
40							
41							
42							
43							
44							
45							
46							
47							
48							
49							
50							
51							
52							
53							
54							
55							
56							
57							
58							
59							
60							
61							
62							
63							
64							
65							
66							
67							
68							
69							
70							
71							
72							
73							
74							
75							
76							
77							
78							
79							
80							
81							
82							
83							
84							
85							
86							
87							
88							
89							
90							
91							
92							
93							
94							
95							
96							
97							
98							
99							
100							

558.91' 7" DRILLING COLLARS

CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

DRILLING ASSEMBLY SERVICE HOLES



[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WILD CAT** WELL NAME **EAST PORCUPINE I 13** LSD SEC TWP Rge W
 DRILLING DEEPENING COMPLETING **FEB 12 1971**
 REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT

DRILLING ASSEMBLY	END OF MORNING TOUR			END OF DAYLIGHT TOUR			END OF AFTERNOON TOUR		
STANDS .. D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	
SINGLE 4 1/2" .. D.P.	NO 2	6316	NO 3	9458	NO 1	9458	NO 1	3128	
X-OVER SUB .. 7 1/4" O.D.		464		464		464		464	
OTHER .. 6 3/4" O.D.		154		154		154		154	
DRILL COLLARS .. 7" O.D.	18	55891		55891		55891		55891	
DRILL COLLARS .. 10" O.D.	NO 2	6042	NO	6042	NO	6042	NO	6042	
REAMER .. O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	
STABILIZER .. 9" O.D.	KIND	560	KIND	560	KIND	560	KIND	560	
JARS	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	
BUMPER SUB	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	
BIT OR CORE BARREL		FT.		FT.		FT.		FT.	
TOTAL D.P. & TOOLS		69427		72569		72569		72569	
KELLY DOWN (BELOW R.B.)		2373		2900		2900		4205	
DEPTH OF TOOLS		71800		75469		75469		79902	

TOUR	MORNING TOUR			DAYLIGHT TOUR			AFTERNOON TOUR		
DEPTH END OF TOUR		718	FEET		754	FEET		799	FEET
DEPTH START OF TOUR		660	FEET		718	FEET		754	FEET
FOOTAGE DRILLED		58	FEET		36	FEET		45	FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.												
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs												
MUD WEIGHT lb/gal												
VISCOSITY sec/qt												
W.L./F.C. c.c. 32nd												
p.H.												
MUD LEVEL IN TANKS Ft. Ins												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	FOOTAGE	FT. HR.	BIT CONDITION
3A	17h	XD68A	RR-OSCIGJ	3-18		660	799	139	10.3	IN

CORE No	No	DST No	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.H.P.	psi	I.F.P.	psi	Time	AM PM
FROM		ISI	mins	F.H.P.	psi	F.F.P.	psi	Mud Wt	lb/gal
TO		VO	mins	I.S.I.P.	psi	G.T.S.	psi	Visc	W.L.F.C.
Recovery		FSI	mins	F.S.I.P.	psi	F.T.S.	psi	A.V.	p.H.
HOURS		RECOVERY						P.V.	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	James Petersen	ARLO WEST	FRASER			
DERRICKMAN	LUDWIG KAPLOWICH	LUDWIG KAPLOWICH	FRASER	TotCo	690	3/4"
HELPER	Don Collins	JAMES SCHENK	VALQUIETTE		757	1/2"
HELPER	F. JUDSON	JIM CROZIER	RANGER		633	1"
HELPER	John Mackinac	HUBERT ALEX	RIMK			
FIREMAN						
TOOL PUSHER						

TOUR 1
 MIXING GEL
 GEL
 4000
 CAUSTIC
 TOUR 2
 50' CAUSTIC
 2500 GEL
 I 12 DEPTH
 1:00 AM 660
 2 660
 3 673
 4 690
 5 703
 6 706
 7 720
 8 736
 9
 10
 11
 12:00 W
 1:00 PM
 2 740
 3 759
 4 763
 5 767
 6 780
 7 789
 8 799
 9
 10
 11
 12:00 PM

SORC WH E. POCUPING YT I-13

OTHER HOURLY OPERATING DETAIL
WORK DONE

1971
DUR
58 FT
8 FT
4 FT
4 FT
1 FT
2 FT
0 FT
0 FT
5 FT
2 FT
FEET
FEET
FEET
HOURS
12:00 P.M.

MUD and CHEMICALS ADDED		From	To
Kind	Amount		
TOUR 1			
		12 ⁰⁰	12 ¹⁵
		12 ¹⁵	2 ⁰⁰
		2 ⁰⁰	2 ¹⁵
		2 ¹⁵	3 ⁰⁰
		3 ⁰⁰	4 ⁰⁰
		4 ⁰⁰	6 ⁰⁰
		6 ⁰⁰	6 ⁴⁵
		6 ⁴⁵	8 ⁰⁰
TOUR 2			
MIXING GEL		8 ⁰⁰	9 ⁰⁰
		9 ⁰⁰	9 ¹⁵
GEL	4000#	9 ¹⁵	2 ¹⁵
4000		2 ¹⁵	4 ⁰⁰
CAUSTIC	50#		
TOUR 3			
SURVEY		4 ⁰⁰	4 ¹⁵
50# CAUSTIC	50#	4 ¹⁵	5 ¹⁵
25 ⁰⁰ GEL	2500#	5 ¹⁵	6 ¹⁵
		6 ¹⁵	9 ⁰⁰
		9 ⁰⁰	10 ⁰⁰
		10 ⁰⁰	12 ⁰⁰

Rig Service
TRIP IN, MAKE UP HEAD
BUILD UP A.P.C. CLEAN 20' TO B.T.M.
Drilling.
CONN & CLEAN TO B.T.M. 10° FILL
Drilling.
Blow Hole, SURVEY & CLEAN TO B.T.M.
Drilling.
DRILLING
RIG SERVICE
WAIT ON WATER
DRILLING
WAIT ON WATER & RIG SURV.
Drilling
Work p.p.h. + SURVEY
Drilling
Circ Hole
BUILD VOLUME IN MUD TANK MIX GEL
Hook up cooling system for COND/BOILER

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

TIME	DEPTH	FOOTAGE	WEIGHT	RPM	AIR PRESS.	% SOAP	FLUID RATE	AIR RATE	
1:00 AM	660	-							<p>NOTE:</p> <p>DRILLING WEIGHTS</p> <p>Run 12</p> <p>460-550 10,000</p> <p>550-580 15,000</p> <p>580-640 20,000</p> <p>640-660 10,000</p>
2	660	-							
3	673	13	10-12	60-70	180	3/4	20	300	
4	690	17							
5	703	13							
6	706	3							
7	720	17							
8	736	16							
9									
10									
11									
12:00 V									
1:00 PM									
2									
3	740	4							
4	754	14							
5	763	9							
6	767	4							
7	780	13							
8	789	9							
9	799	10							
10									
11									
12:00 MID									

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP** RIG NO **14**

FIELD **WHD 147** WELL NAME **EAST POPUPINE I-13** LSD SEC TWP Rge W
 DRILLING DEEPENING COMPLETING REDRILLING ABANDONING REWORKING FOR 24 HOURS ENDING 12 MIDNIGHT **FEB 12 1971**

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS .. D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
SINGLE .. D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
X-OVER SUB .. 7' 4" O.D.		464	FT.		464	FT.		464	FT.		464	FT.
OTHER 6' 1/2" O.D.		154	FT.		154	FT.		154	FT.		154	FT.
DRILL COLLARS 14 9 O.D.		434	62	FT.		496	95	FT.		558	91	FT.
DRILL COLLARS 2 10 O.D.	NO.	604	2	FT.	NO.	604	2	FT.	NO.	604	2	FT.
REAMER .. O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
STABILIZER .. 9' O.D.	KIND	560	FT.	KIND	560	FT.	KIND	560	FT.	KIND	560	FT.
JABS	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BUMPER SUB.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BIT OR CORE BARREL		FT.		FT.		FT.		FT.		FT.		FT.
TOTAL D.P. & TOOLS		506	82	FT.		569	15	FT.		631	11	FT.
KELLY DOWN (BELOW R.B.)	23 18	255	FT.		420	5	FT.		390	5	FT.	
DEPTH OF TOOLS		535	00	FT.		611	20	FT.		660	16	FT.

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR		535	FEET		611	FEET		660	FEET			FEET
DEPTH START OF TOUR		455	FEET		535	FEET		611	FEET			FEET
FOOTAGE DRILLED		80	FEET		76	FEET		49	FEET			FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.												
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs.												
MUD WEIGHT lb/gal												
VISCOSITY sec/qt												
W.L./F.C. c.c./32nd												
p.H.												
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL FT. FOOTAGE	FT. HR.	BIT CONDITION
2-A	17 1/2	147095	H.W. OSCIG	3-18	24	331	660	329	13.7	2-3-1

CORE No.	No.	DST No.	FROM				TO				MUD ENGINEER'S REPORT		
			PREFLOW	mins	IHP	p.s.i.	IHP	p.s.i.	Time	AM	PM	Alk	
FROM			I.S.I.	mins	FHP	p.s.i.	FHP	p.s.i.	Mud Wt			Int Gel	10 Min Gel
TO			V.O.	mins	ISIP	p.s.i.	GTS	p.s.i.	Visc			WLF.C	
Recovery			F.S.I.	mins	FSIP	p.s.i.	FTS	p.s.i.	A.V.			pH	
HOURS			RECOVERY						P.V.			Solid	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	James Peterson	ARLO NAST	FRASER	TOTCO	445'	1'
DERRICKMAN	Law Kaplowich	LAURIE ABRAMOW	FRASER	TOTCO	510	1/2"
HELPER	Don Collins	JAMES SCHENK	VALQUETTE	TOTCO	570	1/2"
HELPER	F. JUDSON	JIM GAZIER	RANDER			
HELPER	John Blacklock	HUBERT ALEX	RIME			
FIREMAN						
TOOL PUSHER						

TOUR 3
TOUR 3
TOUR 3

T.D. DEPTH
 1:00 AM 471
 2 479
 3 484
 4 500
 5 512
 6 513
 7 523
 8 531
 9 548
 10
 11 553
 12:00 N 570
 1:00 PM 532
 2 590
 3 612
 4 612
 5 640
 6 646
 7 650
 8 660
 9
 10
 11
 12:00 M

TOUR REPORT

CONTRACTOR **G P**

RIG NO **14**

FIELD **WILD CAT** WELL NAME

LSD SEC TWP

Rge W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

EAST PORCUPINE I-13
 FOR 24 HOURS ENDING 12 MIDNIGHT **FEB 11 1971**

1971

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P. NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT	
SINGLE	D.P. NO.												
X-OVER SUB	7 3/4" O.D.	464		464		464		464		464		464	
OTHER	6 3/4" O.D.	154		154		154		154		154		154	
DRILL COLLARS	7" O.D.	217	30	7'-8"	248	53	11	341	68	11	341	68	
DRILL COLLARS	10" O.D.	604	2	NO 2	604	2	NO 2	604	2	NO 2	604	2	
REAMER	O.D.												
STABILIZER	9" O.D.					560		560		560		560	
JARS													
BUMPER SUB													
BIT OR CORE BARREL													
TOTAL D.P. & TOOLS													
KELLY DOWN (BELOW R.B.)		361	3	300	5	420	2	420	2	420	2	420	
DEPTH OF TOOLS		320	0	3	50	7	8	45	9	3	5	9	

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED		DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED		DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	
	325	257	63		350	320	30		455	350	105	

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP												
ROTARY SPEED												
WEIGHT ON BIT												
MUD WEIGHT												
VISCOSITY												
W.L./F.C.												
p.H.												
MUD LEVEL IN TANKS												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT HR	BIT CONDITION
1	17 1/2	174095207	1 1/2" X 16 J	3-16	25	141	331	267	10.7	2 - J
2	17 1/2	147295	1 1/2" X 16 J	3-16	8	331	455	124	15.5	Disc 16

CORE	No.	No.	DST No	FROM				TO				MUD ENGINEER'S REPORT				
				PREFLOW	mins	IHP	p.s.i.	FFP	p.s.i.	Time	A.M. P.M.	Air	Int. Grt	10 Min. Grt	W.L.F.C.	
Recovery				F.S.I.	mins	F.S.I.P.	p.s.i.	F.T.S.	p.s.i.	A.V.		p.H.				
HOURS				RECOVERY						P.V.						

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
				Kind	Depth	Reading
DRILLER	James Peterson	Arlo Mast	C. FRASER			
DERRICKMAN	Loce Kurland		C. FRASER	TotCo	154	1
HELPER	D. Collins	James J. Smith	B. Valiquette	TotCo	355	1
HELPER	F. Johnson	Jim Johnson	R. Rando	TotCo	315	1/8
HELPER	J. Mackinnon	Albert Oles	M. Rynn			
FIREMAN						
TOOL PUSHER						

TOUR	DEPTH	TIME
1	325	1:53
2	257	2:03
3	63	2:15
4	350	2:33
5	320	2:46
6	30	2:59
7	455	3:12
8	350	3:20
9	105	3:27
10		
11		
12		
13		
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		
29		
30		
31		
32		
33		
34		
35		
36		
37		
38		
39		
40		
41		
42		
43		
44		
45		
46		
47		
48		
49		
50		
51		
52		
53		
54		
55		
56		
57		
58		
59		
60		
61		
62		
63		
64		
65		
66		
67		
68		
69		
70		
71		
72		
73		
74		
75		
76		
77		
78		
79		
80		
81		
82		
83		
84		
85		
86		
87		
88		
89		
90		
91		
92		
93		
94		
95		
96		
97		
98		
99		
100		

SDRC WM E. PORTUNE YT 1-13

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
9 21				
UR	TOUR 1	12 ⁰⁰	12 ³⁰	Rig Service
FT		12 ¹⁵	12 ⁴⁵	Wait on water
FT		12 ⁴⁵	2 ⁰⁰	Drilling
4 FT		2 ⁰⁰	2 ¹⁵	Conn & Survey
4 FT		2 ¹⁵	5 ¹⁵	Drilling
8 FT		5 ¹⁵	5 ³⁰	Conn & Survey
2 FT		5 ³⁰	8 ⁰⁰	Drilling
FT	TOUR 2	8 ⁰⁰	8 ¹⁵	RIG SERVICE
0 FT		8 ¹⁵	9 ¹⁵	DRILLING
FT		9 ¹⁵	10 ⁰⁰	CIRC. PRIOR TO TRIP
FT		10 ⁰⁰	1 ³⁰	TRIP FOR NEW BIT
FT		1 ³⁰	2 ⁰⁰	CIRC. BUILD UP AIR
FT		2 ⁰⁰	3 ⁰⁰	TRY TO MAKE CONNECTION
2 FT				Hold Slurries
3 FT	TOUR 3	3 ⁰⁰	4 ⁰⁰	DRILLING
FEET		6 ⁰⁰	5 ¹⁵	Drilling
FEET		5 ¹⁵	5 ⁴⁵	WORK D/C CON. & Rig SERVICE
FEET		5 ⁴⁵	7 ¹⁵	Drilling
FEET		7 ¹⁵	7 ⁴⁵	WORK D/C CON & SURVEY
HOURS		7 ⁴⁵	11 ¹⁵	Drilling
12:00 P.M		11 ¹⁵	12 ⁰⁰	WORK D/C & CON

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

Time	Depth	Flow GE	WT	RPM	Pressure	% SOAP	Flow Rate	Ann Rate
1:00 PM	253	1	5	60-70	162	3/4	15	320
2	263	10	↓	↓	↓	↓	↓	↓
3	275	7	↓	↓	↓	↓	↓	↓
4	283	13	↓	↓	↓	↓	↓	↓
5	296	8						
6	299	2						
7	310	11						
8	320	10						
9	327	7						
10								
11								
12:00 PM								
1:00 PM								
2	331	4	10					
3			↓					
4	350	19	↓					
5	362	12						
6	377	15						
7	393	16						
8								
9	423	30						
10	434	11						
11	450	16						
12:00 PM	455	5						

Flow Diagram
(All wells in production)

[Signature]
SIGNATURE COMPANY ENGINEER

SORC WH EAST PORCUMINE I - ?

MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1		12 ⁰⁰	12 ¹⁵	RIG SERVICES
		12 ¹⁵	3 ⁰⁰	SUB UP 10' D.C. TO KELL
		3 ⁰⁰		FACE UP POINTING HEAD
			3 ³⁰	MIX UP FOAM + CIRCULAR
		3 ³⁰	7 ⁰⁰	DRILL
		7 ⁰⁰	8 ⁰⁰	CIRC. + MAKE CONNECTION
		8 ⁰⁰		AT DOWN SINGLE, BREAK OUT SUBS
			9 ¹⁵	PICK UP 10' D.C., 1- 7' D.C.
		9 ¹⁵	9 ³⁰	RIG SERVICE + SURVEY
TOUR 2		9 ³⁰	10 ¹⁵	PICK UP KELL + MAKE UP HEAD
		10 ¹⁵	12 ³⁰	DRILL
		12 ³⁰	1 ¹⁵	CONNECTION + SURVEY
		1 ¹⁵	2 ¹⁵	DRILL
		2 ¹⁵	3 ⁰⁰	WORK ON SAND TAMP
		3 ⁰⁰	3 ¹⁵	DRILL
		3 ¹⁵	3 ³⁰	CIRC.
		3 ³⁰	4 ⁰⁰	DRILL
TOUR 3		4 ⁰⁰	6 ⁰⁰	DRILL
		6 ⁰⁰	6 ¹⁵	R.S. + SURVEY
		6 ¹⁵	8 ⁴⁵	DRILL
		8 ⁴⁵	9 ¹⁵	WORK PIPE AND COWL
		9 ¹⁵	10 ³⁰	DRILL
		10 ³⁰	11 ³⁰	WAIT ON WATER
		11 ³⁰	11 ⁴⁵	DRILL
		11 ⁴⁵	12 ⁰⁰	WORK PIPE ON COWL + SURVEY

SPUDDED IN
3:30 AM FEB 10, 1971

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

TIME	DEPTH	FOOTAGE	WT	RPM	AIR PRESSURE	% SOAP	FLOW RATE
1:00 AM							?
2							
3	64					1%	10 gpm
4	64						
5	80	16	7	70	150		
6	80	—			↓		
7	105	25	7		↓		
8	111	6	7				
9							
10	114	3	8				
11	105	11	8			3/4%	
12:00 PM	137	12	8				
1:00 PM	137	—					
2	159	22	8				
3	165	16	8				
4	174	9	8				
5	187	13	8				
6	201	14	8				
7	205	4	8				
8	212	7	8		155		
9	233	21	8				
10			5				
11			5				
12:00 PM	257	34	5				

FOAM DRILLING
(AIR, WATER + UNLEADED GAS)

[Signature]
SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR

GP

RIG NO 14

FIELD _____ WELL NAME _____
 DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

LSD _____ SEC _____ TWP _____
 Rge _____ W _____
 EAST PORCUPINE I-13
 FOR 24 HOURS ENDING 12 MIDNIGHT

FEB 9 1971

DRILLING ASSEMBLY	END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
	NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT
STANDS " D.P.												
SINGLE " D.P.												
X-OVER SUB " O.D.												
OTHER " O.D.												
DRILL COLLARS " O.D.												
DRILL COLLARS " O.D.	NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT	NO.	FT
REAMER " O.D.	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT
STABILIZER " O.D.	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT
JARS	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT
BUMPER SUB.	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT	KIND	FT
BIT OR CORE BARREL		FT		FT		FT		FT		FT		FT
TOTAL D.P. & TOOLS		FT		FT		FT		FT		FT		FT
KELLY DOWN (BELOW R.B.)		FT		FT		FT		FT		FT		FT
DEPTH OF TOOLS		FT		FT		FT		FT		FT		FT

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	FEET	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	FEET	DEPTH END OF TOUR	DEPTH START OF TOUR	FOOTAGE DRILLED	FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 A.M.	4:00 A.M.	6:00 A.M.	8:00 A.M.	10:00 A.M.	12:00 A.M.	2:00 P.M.	4:00 P.M.	6:00 P.M.	8:00 P.M.	10:00 P.M.	12:00 P.M.
PUMP s.p.m. p.s.i.	/	/	/	/	/	/	/	/	/	/	/	/
ROTARY SPEED R.P.M.												
WEIGHT ON BIT M lbs.												
MUD WEIGHT lb/gal												
VISCOSITY sec/qt												
W.L./F.C. c.c./32nd	/	/	/	/	/	/	/	/	/	/	/	/
p.H.												
MUD LEVEL IN TANKS Ft.-Ins.												

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES IN 1/32	TOTAL HOURS	FROM	TO	TOTAL BIT FOOTAGE	FT-HR	BIT CONDITION

CORE No.	No.	DST No.	FROM				TO				MUD ENGINEER'S REPORT		
			PREFLOW	mins.	I.H.P.	p.s.i.	I.F.P.	p.s.i.	Time	AM	PM	AK	
			I.S.I.	mins.	F.H.P.	p.s.i.	F.F.P.	p.s.i.	Mud Wt.			10 Min. Gel	
			V.O.	mins.	I.S.I.P.	p.s.i.	G.T.S.	p.s.i.	Visc.			W.L.F.C.	
			F.S.I.	mins.	F.S.I.P.	p.s.i.	F.T.S.	p.s.i.	A.V.			p.H.	
			RECOVERY:						P.V.			Solid	

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	Y.P.	DEVIATION RECORD		
					Kind	Depth	Reading
DRILLER	D. Sodergren	D. Collins	J. Peterson				
DERRICKMAN		L. KARLINSKI					
HELPER	ROO ROGERS	M. KING	J. SCHENK				
HELPER	L. CHERNIEWSKI	J. HACKNACK	A. Alex				
HELPER	L. NYCHOLAF	K. WILSON	J. CRUZIER				
FIREMAN		R. VANQUETTE					
TOOL PUSHER							

SOBC W#1 EAST ROCKWINE YT I-13

1971

MATERIALS AND CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR	TOUR			PUT SWIVEL BACK TOGETHER. SCREEN SWIVEL INTO KELLY AND PICK UP SAME. REPLACE OILER LINES ON ROTARY GUARDS. HOOK MOTOR SWIVEL - OFFS AND THROTTLE CONTROLS ON FLOOR MOTORS. START #2 FLOOR MOTOR PICK UP HOUSE HOLE SOCK + DROP IN HOOK UP SHOCK HOSES ON PUMPS + HUB LINES HANG LINE SPOOLER HOOK UP CONTROLS TO #2 PUMP GENERAL RIG UP TO SPUD STRING GEOLOGICAL LINE RIG UP LIGHTS TO END OF BLOODLINE FILL REFRIGERATOR COIL W/ALCOHOL, MAKE UP + HOOK UP LINES TO SAME.
FT.				
FT.				
FT.				
FT.				
FT.				
FT.				
FT.				
FT.				
FT.				
TOUR	TOUR 2			GENERAL RIG TO SPUD SET KELLY SOCK IN RATHOLE PICK UP ROTATING HEAD, HEAT UP + INSTALL SAME ON KELLY. PICK UP CALIBER + MEASURE 10" DRILL COLLAR
FT.				
FT.				
FT.				
FT.				
FT.				
TOUR	TOUR 3			PREPARING TO SPUD
FEET				
FEET				
FEET				
HOURS				
M.	12:00 P.M.			

CEMENTING, TESTING, FISHING SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

PREPARING TO SPUD

TEMP: -25' WINDY + CLOUDY

[Signature]
 SIGNATURE COMPANY ENGINEER

TOUR REPORT

CONTRACTOR **GP**

RIG NO **14**

FIELD **W. LIGHT** WELL NAME

LSD SEC TWP

Rge W

DRILLING DEEPENING COMPLETING
 REDRILLING ABANDONING REWORKING

FOR 24 HOURS ENDING 12 MIDNIGHT

Feb 5

1971

DRILLING ASSEMBLY		END OF MORNING TOUR				END OF DAYLIGHT TOUR				END OF AFTERNOON TOUR			
STANDS	D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
SINGLE	D.P.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
X-OVER SUB	O.D.		FT.		FT.		FT.		FT.		FT.		FT.
OTHER	O.D.		FT.		FT.		FT.		FT.		FT.		FT.
DRILL COLLARS	O.D.		FT.		FT.		FT.		FT.		FT.		FT.
DRILL COLLARS	O.D.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.	NO.	FT.
REAMER	O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
STABILIZER	O.D.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
JARS		KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BUMPER SUB		KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.	KIND	FT.
BIT OR CORE BARREL			FT.		FT.		FT.		FT.		FT.		FT.
TOTAL D.P. & TOOLS			FT.		FT.		FT.		FT.		FT.		FT.
KELLY DOWN (BELOW R.B.)			FT.		FT.		FT.		FT.		FT.		FT.
DEPTH OF TOOLS			FT.		FT.		FT.		FT.		FT.		FT.

TOUR	MORNING TOUR				DAYLIGHT TOUR				AFTERNOON TOUR			
DEPTH END OF TOUR				FEET				FEET				FEET
DEPTH START OF TOUR				FEET				FEET				FEET
FOOTAGE DRILLED				FEET				FEET				FEET

DAY WORK	HOURS				HOURS				HOURS			
	2:00 AM	4:00 AM	6:00 AM	8:00 AM	10:00 AM	12:00 AM	2:00 PM	4:00 PM	6:00 PM	8:00 PM	10:00 PM	12:00 PM
PUMP	/											
ROTARY SPEED	/											
WEIGHT ON BIT	/											
MUD WEIGHT	/											
VISCOSITY	/											
W.L.F.C.	/											
p.H.	/											
MUD LEVEL IN TANKS	/											

NO.	SIZE	SERIAL	BIT KIND AND TYPE	JET SIZES (4, 2, 1)	TOTAL HOURS	FROM	TO	REASON FOR CHANGE	BIT CONDITION

CORE No.	No.	DST No.	FROM	TO	MUD ENGINEER'S REPORT				
TYPE		PREFLOW	mins	I.H.P.	ps	F.P.	ps	Time	AM
FROM		IS	mins	F.H.P.	ps	F.P.	ps	Mud Wt	PM
TO		VO	mins	I.S.T.P.	ps	G.T.S.	ps	Visc	
Recovery		FSI	mins	F.S.I.P.	ps	F.T.S.	ps		
HOURS		RECOVERY							

SIGNATURES	MORNING TOUR	DAYLIGHT TOUR	AFTERNOON TOUR	DEVIATION RECORD		
	Kind	Depth	Reading			
DRILLER	<i>J. Johnson</i>	<i>L. Johnson</i>	<i>J. Johnson</i>			
DERRICKMAN	<i>R. Johnson</i>	<i>H. Johnson</i>	<i>J. Johnson</i>			
HELPER	<i>L. Johnson</i>	<i>F. Johnson</i>	<i>A. Johnson</i>			
HELPER	<i>L. Johnson</i>	<i>F. Johnson</i>	<i>A. Johnson</i>			
HELPER	<i>L. Johnson</i>	<i>F. Johnson</i>	<i>A. Johnson</i>			
FIREMAN	<i>L. Johnson</i>	<i>F. Johnson</i>	<i>A. Johnson</i>			
TOOL PUSHER	<i>D. Johnson</i>					

SOBC WH EAST PORCUPINE YT 1-13

19 7.1

DUR

FT.
FT.
FT.
FT.
FT.
FT.
FT.
FT.
FT.
FT.
FT.

MUD and CHEMICALS ADDED		From	To	OTHER HOURLY OPERATING DETAIL WORK DONE
Kind	Amount			
TOUR 1				DOWN SEAM 7' 1" WITH LUGS PUMP UP WATER TO 100' TO WATER TABLE 100' WATER TABLE - BUT 20' IN LUGS CLEAN UP CHANGE HOUSE CLEAN UP LOG HOUSE HANG V - DUCK
TOUR 2				INSTALL JOINTS AND CONNECTOR PIPE + WELD CONDUCTOR PIPE AND ONE SECTION SLIDE LINE. GENERAL WIGGINS W.P. PICK UP STAIN PIPE VALVE AND FILL-UP LINE VALVE ABOVE FLOOR. HANG KELLY HOSE AND HOOK UP PUMPS. INSTALL ROTARY STAIN + GUARDS PICK UP SWIVEL AND WORK ON SAME
TOUR 3				

FEET
FEET
FEET

HOURS
12:00 P.M.

CEMENTING, TESTING, FISHING, SPECIAL JOB DETAILS, INCLUDING ENGINEERING SUMMARIES

WELL NAME: SOBC WH EAST PORCUPINE YT 1-13

LOCATION: N 66° 02' 35", W 137° 46' 53"

ORIGINAL GROUND ELEVATION: 1645 (ev) 3 1/2' FILL ELEVATION

KB ELEVATION: 1665.40'

LEASE NO: 498

CONTRACTOR: GENERAL PERZELLING DRILLING LTD. P# 114

DRILLWORKS: CARBIDE DR WITH 36" CARBIDE BIT

DECK: 131' I.C. HOSE (RATED 510,000 LB)

FLOOR ENGINES: 2 CATAMARAN D-353 TR DIESEL (TOTAL 720 HP)

MAIN PUMP: NATIONAL C-250 7 1/2" x 13" COMPOUND

STANDBY PUMP: NATIONAL C-250 7 1/2" x 13" UNION BY GA 6-71 (275 HP)

ROP'S: HYDRA-GX 12" x 900 SERIES OPERATED WITH SHOCK

SHACKS: 12" x 900 SERIES DOUBLE GATE OPERATED MANUALLY

OR WITH HAND WHEELS.

DRILL PIPE: 4 1/2" GRADE E WITH 6" DR. PIPE ONE END AND

DRILL COLLARS: 2 - 10" x 2 7/8" x 30' WITH 7 5/8" 11.90 CONNECTIONS

20 - 7" x 2 7/8" x 20' " 5" 11.90 "

MUD TANKS: 2 (33' x 7 1/2' x 6') CAP 353 bbl

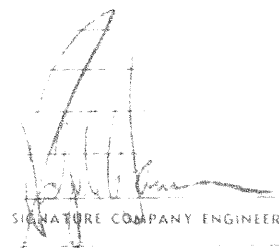
POWER SEALS: KELCO (AIR OIL)

AUTO UNLOCK: TEXAS FLANGE

TORQUE GAGE: AMERICAN TONG

ROPE: TORQUE GAGE: AMERICAN TONG

DRILLING TIME RECORDER: SUIK


SIGNATURE COMPANY ENGINEER