WELL HISTORY REPORT

CHEVRON SOBC WM W. PARKIN YT C-33

January 19, 1972

R. C. Richardson, P. Eng.
Project Manager



TABLE OF CONTENTS

		Page
SECT	ION I - SUMMARY OF WELL DATA	1-2
(a)	Well Name and Number	
(b)	Permittee, Licensee or Lessee	
(c)	Name of Operator	
(d)	Location	
	Coordinates	
	Permit or Lease Number	
	Drilling Contractor	
(h)	Drilling Authority	
(i)	Classification	
	Elevations	
	Spudded	
	Completed Drilling	
(m)	T.D. and P.B.T.D.	
(n)	Well Status	
	Hole Sizes to Total Depth	
	Casing	
(r)	Engineers and Geologists	
STO	TION II - GEOLOGICAL SUMMARY	3–18
21101	TION II OHODOTOHI DOMENTE	
(a)	Formation Tops	3
	Cored Intervals	3
	Core Descriptions	3
	Sample Descriptions	6
(e)		18
SECT	TION III - ENGINEERING SUMMARY	19-22
(a)	Report of Drill-Stem Tests	19
(b)	Casing Record	20
(c)	Bit Record	21
(d)	Mud Report	21
(e)	Deviation Record	22
(f)	Abandonment Plugs	22
(g)	Lost Circulation Zones	22
(h)	Report of Blowouts	22
SEC	TION IV - LOGS	23

Table of Contents - Continued

		Page
SECT	ION V - ANALYSIS	24
	Core Analysis Water Analysis Gas Analysis Oil Analysis	
SECT	ION VI - COMPLETION SUMMARY	25
(c)	Tubing Record Perforation Record Cementation Record Acidization and Fracturing Record Back Pressure and Production Tests	

SECTION I - SUMMARY OF WELL DATA

(a) Well Name and Number

Chevron SOBC WM W. Parkin YT C-33

(b) Permittee, Licensee or Lessee

Western Minerals Limited

(c) Name of Operator

Chevron Standard Limited 400 Fifth Avenue S.W. Calgary 1, Alberta

(d) Location

Unit C, Section 33, Grid 66-20 - 137-15 UWLR - 66.20111 N

(e) Coordinates

UWI - 300C336620-137150

Latitude: 66° 12' 04" N; Longitude: 137° 21' 56" W Note: See amendment of December 15, 1971

(f) Permit or Lease Number

Permit No. 3354

(g) Drilling Contractor

G. P. Drilling Ltd., Rotary Rig #14

(h) Drilling Authority

No. 554, issued November 3, 1971

(i) Classification

Wildcat

(j) Elevations

Ground elevation - 1687.7': K.B. elevation - 1706'

(k) Spudded

15:00 hours, November 29, 1971

(1) Completed Drilling

10:45 hours, January 9, 1972

- (m) I.D. and P.B.T.D.
 - T.D. 4123' : P.B.T.D. Surface
- (n) Well Status

Dry and permanently abandoned

(o) Rig Release Date

24:00 hours, January 15, 1972

- (p) Hole Sizes to Total Depth
 - " 30" Hole from surface to 60' K.B.
 - 24" Hole from 60' to 70'
 - $\sqrt{17-1/2}$ " Hole from 70' to 826'
 - 12-1/4" Hole frcm 826' to 846'
 - ∠ 8-3/4" Hole from 846 to 4123 to
- (q) Casing

19" O.D. conductor pipe set at 69' K.B. 13-3/8" K-55, 54.5# casing set at 823' K.B.

(r) Engineers - L. F. Grumbley - H. Herring Geologists - O. Gietz - N. Schultheis

SECTION II - GEOLOGICAL SUMMARY

(a)	Formation Tops				
	Formation	<u>Dep</u> os Samples	Logs		Elevation K.B. 1706'
	Eagle Plain	Surface	Surface		
	Blackie Sandstone Member	1605	1594		+ 112
	L. Cretaceous Shale Unit	1880	1774		- 68
	Orange Marker	2195	2192	3 3	- 486
	Basal Siltstone Unit	2640	2640		- 934

2873

3490

2873

3550

-1167

-1844

T.D.: 4123' (-2417)

Mississippian Limestone

Mississippian (Chance Sst.)

(b) Cored Intervals

Core No.	<u>Interval</u>	Formation	Recovery	
1	2268-2286	Orange Marker	18 t	
· 2	2287-2317	Orange Marker	301	
√ 3	2877-2937	Chance Sandstone	58.5'	

(c) Core Description

Core #1 2268-2286' Rec. 18'
Coring Times 19, 18, 23, 23, 22, 19, 22, 19, 20, 18, 20, 23, 20, 20, 36, 36, 30. Core Jammed.

2268-2274 Chert grit conglomerate. Chert pebbles up to 1 cm., well
6.0 rounded to subrounded; brown, grey, green, in a fine to
medium grained grey sandstone matrix. Glauconitic; siliceous
cement. Poor intergranular porosity. Traces of gas bubbling,
brown oil staining. Strong gas odor.

2274-2283 Sandstone, brown-grey, fine grained, argillaceous, non-calca-9.0 reous, glauconitic. Scattered chert pebbles. Upper contact is gradational, decrease in chert pebbles content of the matrix sand. Traces of intergranular porosity, oil stain, fluorescence. Trace of gas bubbling.

2283-2286 Shale, black, non-calcareous, sub-fissile, scattered pyrite blebs and nodules. Slickensided. Upper contact appears erosional or irregular, slumped. Dip of contact 45° to core axis.

Core #2

Coring Times

18, 27, 30, 24, 25, 24, 25, 24, 22, 24, 25, 22, 18, 20, 23, 23, 21, 22, 22, 22, 26, 24, 24, 25, 25, 23, 25, 27, 25.

Core discontinued because of iron in the borehole.

2287-2317 Shale, dark, micromicaceous, non-calcareous, sub-fissile.
30.0 Much pyrite, disseminated along bedding planes, and as fine nodules. Scattered, faintly calcareous brown-grey ironstone concretions. Bedding dip 5° to core axis.

Core #3 - 2877-2937 Rec. 58.5°

Coring Times - 35, 20, 15, 10, 10, 15, 13, 12, 17, 13, 9, 26, 31, 11, 11, 25, 19, 32, 37, 33, 28, 24, 12, 15, 17, 32, 16, 27, 28, 24, 25, 30, 23, 26, 13, 14, 18, 15, 16, 15, 20, 20, 15, 13, 11, 17, 17, 18, 20, 19, 12, 20, 21, 18, 18, 20, 30, 20, 25, 23.

Core Description -

2877-2878 - Shale, grey-brown, sandy, silty, pyritic, non-calcareous.

2878-2879.8 - Sandstone, light brown, fine to medium grained, subrounded

1.8 to subangular well sorted quartz grains, scattered glauconite,
non-calcareous. Fair intergranular porosity, stain, fluorescence.

2879.8-2880 - Sandstone, pale grey, medium grained subangular to subrounded quartz grains, well sorted. Poor intergranular porosity, light oil stain, fluorescence.

2880-2884.6 - Sandstone, brown, medium to coarse grained, poor to fair
4.6 sorting of subangular quartz grains, scattered coarse, subrounded quartz and chert grains. Trace of glauconite. Plant
remains at 2883'. Good intergranular porosity, oil stain,
fluorescence.

2884.6-2885.8 - Conglomerate, brown, chert and clay stones, up to 10 cm. in

1.2 a brown sandstone-grit matrix. Non-calcareous. Much secondary silica as cement and crystal facies. Fair porosity, oil stain, fluorescence.

2885.8-2886.6 - Sandstone, grey, medium grained, irregular argillaceous partings-0.8 slumped. Trace of pyrite. Poor intergranular porosity, light oil stain, fluorescence.

2886.6-2887.6 - Sandstone, grey-brown, medium to coarse grained, scattered

1.0 coarse chert grit. Subangular, poorly sorted quartz grains.

Trace of glauconite, pyrite. Fair intergranular porosity,
oil stain, fluorescence.

2887.6-2892.0 - Sandstone, brown, coarse grained - fine chert grit in a medium
4.4 grained sandstone matrix. Subrounded quartz and chert grains,
fairly well sorted matrix, slightly calcareous. Good intergranular porosity, oil stain, fluorescence.

2892.0-2893 - Sandstone, light grey, medium to coarse grained, poor to fair sorting, very calcareous, tight. Subrounded grey and dark grey chert grit and quartz sand in a limestone matrix.

- 2893-2901.9 Sandstone, brown, coarse grained chert grit in a medium grained sandstone matrix, poor to fair sorting, slightly calcareous. Good porosity, oil stain, fluorescence.
- 2901.9-2903.5 Sandstone, dark brown-grey, argillaceous, fine to medium 1.6 grained. Shale parting at top dips 5°. Poor intergranular porosity, oil stain, fluorescence.
- 2903.5-2907.8 Sandstone, pale grey, medium to coarse sandstone-chert grit, 4.3 in a very calcareous matrix - limestone approx. 30% of rock. Tight. Scattered dark grey shale partings. Traces of oil bleeding, 2906-2906.9.
- 2907.8-2915.6 Sandstone, grey-brown, coarse grained, subrounded quartz and chert grains, calcareous, argillaceous matrix. Poor to fair porosity, partly infilled with bitumen. Oil bleeding, oil stain and fluorescence.
- 2915.6-2918.1 Limestone, or limey sandstone, dark brown-grey, fine grained, 2.5 scattered crinoid fragments. Poor intergranular porosity, stain, fluorescence.
- 2918.1-2922.3 Sandstone, grey, very calcareous, medium to coarse grained;
 4.2 subrounded quartz and chert grains, grading in part to a sandy grit. Slightly calcareous. Few dark grey shale partings. Fair intergranular porosity, partly infilled with bitumen. Oil stain, fluorescence.
- 2922.3-2926.3 Sandstone, pale grey, medium grained quartz-chert sand, sub-4.0 rounded, fairly well sorted, very calcareous matrix (25%-30%). Tight, except for a few streaks of oil bleeding.
- 2926.3-2926.6 Sandstone, dark grey, argillaceous, calcareous, fine to 0.3 medium grained. Beds dip at 30°. Poor intergranular porosity, oil stain, fluorescence.
- 2926.6-2935.5 Sandstone, grey, medium to coarse grained, fine chert grit in a medium grained very calcareous (25%-30%) sandstone matrix. Trace of pyrite dip 30°. Subrounded, poorly sorted quartz and chert grains. Tight except for oil bleeding 2927.5-2928.4.
- 2935.5-2937 Core not recovered.

(d) Sample Description

Conductor Pipe set at 50'.
Sample description starts at 60'-70' interval.

- 50-70 Shale, grey, silty, non-calcareous, blocky. Minor rust stained shale. Trace of gypsum crystals.
- 70-80 Shale, grey, micromicaceous in part, non-calcareous. Minor interbedded grey, sandy and silty shale.
- 80-100 Shale, as above. Trace of brown, blocky shale, sandy streaks, trace of plant remains.
- 100-110 Shale, as above. Much interbedded fine grained grey S&P argillaceous, kaolinitic, micaceous sandstone. Trace of pale grey argillaceous siltstone.
- 110-120 Sandstone, grey-brown, S&P. Fine grained, slightly glauconitic, faintly calcareous, kaolinitic, argillaceous, tight. Trace of carbonized plant remains.
- 120-130 Shale, grey, blocky to sub-fissile, non-calcareous, micromicaceous. Minor sandstone, as above.
- 130-140 Shale and sandy shale, interbedded fine grained sandstone, rusty red stained.
- 140-160 Sandstone, fine to medium grained, grey and brown, S&P, argillaceous, non-calcareous, angular to subangular quartz and chert grains. Tight.
- 160-170 Sandstone, very fine to fine grained, grey, S&P, argillaceous, calcareous in part, tight. Much interbedded grey sandy and silty shale.
- 170-180 As above. Much rust-red staining of shale and sandstone.
- 180-190 Sandstone, grey, S&P, very fine grained, trace micaceous, argillaceous, non-calcareous, tight.
- 190-200 Interbedded sandstone, very fine to fine grained, and shale and sandy shale. Much rust staining.
- 200-210 Sandstone, grey, S&P, fine to medium grained, subangular, fair sorting. Fair intergranular porosity, no stain.
- 210-230 Sandstone, grey, S&P, fine to medium grained. Traces of fair intergranular porosity. No stain. Much grey, S&P, slightly argillaceous, kaolinitic sandstone, tight.

- 230-250 Sandstone, grey S&P, medium grained, calcareous. Subangular quartz and chert grains, fairly well sorted, kaolinitic.

 <u>Much loose sand</u>. Traces of fair intergranular porosity. No stain.
- 250-270 Sandstone, grey S&P, medium grained, subangular quartz and chert grains, fairly well sorted, kaolinitic. Traces of fair porosity, questionable cut and fluorescence.
- 270-340 Shale, grey and light grey, blocky, non-calcareous, micromicaceous.

 Traces silty, sandy streaks.
- 340-360 Shale, grey, silty, non-calcareous. Traces of grey-brown shale, grey-green shale, trace of plant remains, minor grey sandy streaks.
- 360-400 Shale, grey, silty, micromicaceous, interbedded argillaceous siltstone. Trace of coaly fragments.
- 400-410 Sandstone, fine grained, grey, S&P, argillaceous. Much interbedded grey, micromicaceous shale.
- 410-450 Shale, grey, silty, micromicaceous, blocky, non-calcareous. Few sandy streaks.
- 450-470 Shale and silty shale, as above. Minor interbedded grey S&P, fine to medium grained sandstone, kaolinitic.
- 470-480 As above. Minor grey-green shale.
- Sandstone, grey S&P, medium grained, subangular quartz and chert grains, non-calcareous, fair sorting. Good intergranular porosity, no stain. Much loose grains, 500-510.
- 520-540 Shale, grey-green, blocky, and grey, micromicaceous, silty.
- 540-580 Sandstone, grey S&P, medium grained, subangular quartz and chert grains, slightly kaolinitic. Fair intergranular porosity (trace of oil stain spotty, good cut and fluorescence, 540-550).
- 580-610 Shale, brown-grey and grey, silty, trace of ironstone, plant remains. Much interbedded fine grained grey sandstone, steaks of medium grained sandstone with fair porosity, no stain.
- Sandstone, grey S&P, fine to medium grained fairly well sorted, subangular quartz and chert grains, non-calcareous, argillaceous. Streaks of porous sandstone (spotty staining, yellow-green fluorescence and cut, 610-620).
- 640-660 Sandstone, grey S&P, medium grained, friable much loose sand.
 Non-calcareous, good porosity, no stain.

- 660-700 Shale, grey, micromicaceous, silty streaks. Minor brown blocky shale, trace of ironstone.
- 700-710 Siltstone, argillaceous, grading to silty shale, grey and greybrown. Trace of plant remains.
- 710-820 Shale, dark medium grey, sub-fissile, micromicaceous, silty, sandy streaks. Trace of ironstone.
- 820-830 Sandstone, grey, finely S&P, fine grained, argillaceous, non-calcareous. Traces coaly fragments, gypsum. Much shale, as above.

Surface casing landed at 823 K.B. Cemented with 850 sacks cement plus 3% CaCl₂.

- 830-840 Sandstone, grey, very fine grained, argillaceous, grading to sandy shale. Trace of coarse sandstone grit in a pale grey silicious matrix. Trace of chert grit, trace of dark grey limestone.
- 840-850 Coal
- 850-915 Shale, grey, sub-fissile to blocky, non-calcareous, micro-micaceous. Few silty streaks, trace of coal.
- 915-920 Sandstone, grey, S&P, fine grained, argillaceous, non-calcareous, kaolinitic. Scattered streaks of medium grained sandstone with intergranular porosity, trace of cut and fluorescence.
- 920-930 Sandstone, as above, 60%.
 Sandstone 40%, grey, S&P, medium to coarse grained, fairly well sorted quartz and chert grains, subangular. Good intergranular porosity, oil stain, cut and fluorescence.
- 930-940 Shale, grey and light grey, smooth, blocky to sub-fissile, micromicaceous 60%. Sandstone, as above, grey S&P, medium to coarse grained, subrounded to subangular quartz and chert grains, fairly well sorted, friable. Good intergranular porosity, oil stain, cut and fluorescence.
- 940-950 Shale, as above. Sand, as above, approx. 15% of sample cvgs.
- 950-960 Shale, as above. Much casing cement.
- 960-990 Shale, grey and dark grey, micromicaceous, sub-fissile, non-calcareous. Minor coal, trace of sandy shale, traces of plant fragments. Much casing cement.
- 990-1000 Shale, as above. Sandstone, dark medium grey, S&P, very fine grained, argillaceous, non-calcareous. Trace of plant remains, chert pebbles.

- 1000-1020 Shale, dark medium grey and grey, sub-fissile to blocky, micromicaceous, non-calcareous.
- 1020-1030 Shale, as above. Minor sandstone streaks, grey, S&P, fine grained, argillaceous, non-calcareous.
- 1030-1120 Shale, grey and dark grey, blocky to sub-fissile, non-calcareous, trace of plant remains 60%.

 Sandstone, grey, S&P, fine grained, argillaceous, non-calcareous, kaolinitic, streaks of medium grained sandstone, tight 40%.
- 1120-1130 Shale, grey and dark grey, sub-fissile to blocky, trace of micromicaceous, non-calcareous. Traces of very fine grey sandy streaks.
- 1130-1140 Shale, as above. Sandstone, pale grey, S&P, very fine grained, argillaceous, non-calcareous, silicious.
- 1140-1150 Sandstone, light grey S&P, fine grained, trace of glauconite. Subangular to subrounded, fairly well sorted quartz and chert grains. Trace of intergranular porosity, faint cut and fluorescence.
- 1150-1160 Shale, grey and light grey, sub-fissile, non-calcareous. Minor sandstone, as above.
- 1160-1180 Shale, grey and light grey, sub-fissile, non-calcareous, micro-micaceous in part. Traces of grey siltstone, minor grey sandy streaks. Trace of ironstone, plant remains.
- 1180-1200 Sandstone, pale grey, fine grained, fairly well sorted subangular to subrounded quartz, minor chert grains, argillaceous, non-calcareous. Trace of glauconite. Traces of intergranular porosity, no stain, very faint cut and fluorescence.
- 1200-1210 Sandstone, as above 40%. No stain, cut or fluorescence. Shale - 60%, grey, light grey and light brown, blocky to subfissile, non-calcareous. Trace of grey-green shale.
- 1210-1240 Shale, as above. Trace of fine grey sandy streaks.
- 1240-1270 Sandstone, light grey, S&P, fine grained, argillaceous, non-calcareous. Fairly well sorted, subrounded to subangular quartz and chert grains, trace of glauconite. Trace of chert grit, plant remains.
- 1270-1280 Sandstone, as above, trace of coarse sandstone. Shale, grey, blocky, silty in part, non-calcareous. Trace of ironstone, plant remains.
- 1280-1300 Sandstone, grey, S&P, fine to medium grained, subrounded to subangular, fair sorting, quartz and chert grains, argillaceous, trace of glauconite, much grey silty, blocky shale.

- 1300-1320 Shale, grey, silty, blocky, non-calcareous.
- 1320-1340 Shale, as above, interbedded grey S&P siltstone and medium grained argillaceous sandstone. Trace of glauconite, chert pebbles.
- 1340-1380 Sandstone, pale grey, fine grained, well sorted, subangular quartz grains, faintly calcareous. Tight.
- 1380-1440 Shale, grey and dark grey, blocky to sub-fissile, micro-micaceous, silty streaks, non-calcareous. Traces of grey-green shale, plant fragments, ironstone.
- 1440-1490 Shale, grey and light grey, sub-fissile to blocky, non-calcareous. Traces of plant remains, silty streaks. Silty and very fine grained sandy streaks.
- 1490-1500 Shale, as above. Traces to minor sandstone, fine grained, brown-grey and grey, argillaceous in part, non-calcareous. Trace of fluorescent cut, sand appears to be tight.
- 1500-1600 Shale, grey to dark medium grey, blocky to sub-fissile, non-calcareous, micromicaceous in part, trace of brown shale, trace of ironstone, plant remains. Interbedded sandstone, very fine to fine grained, and siltstone, pale grey and grey-brown, non-calcareous. No stain, cut or fluorescence.
- 1600-1610 Shale, grey, light grey and brown, blocky to sub-fissile. Much brown, silty shale, plant remains. Minor grey-brown and pale grey, very fine to fine grained sandstone, trace calcareous. Fairly well sorted subangular quartz grains. Traces of pale grey medium grained quartz sand, good porosity, no stain, fluorescence or cut.
- 1610-1620 Shale, as above. Much brown siltstone and very fine grained quartz sandstone. Sandstone, pale grey, S&P, kaolinitic, non-calcareous, subrounded to subangular quartz, fairly well sorted, fine to medium grained, sparse silica cement, friable. Good intergranular porosity, no stain, cut or fluorescence.
- 1620-1630 As above. Increase in pale grey friable sandstone content.
 No stain, cut or fluorescence in porosity.
- 1630-1640 As above. Questionable cut and fluorescence of porous sandstone.
- 1640-1650 As above. Much shale interbedded. No stain, fluorescence or cut.
- 1650-1670 Sandstone, pale grey and pale brown-grey, fine to medium grained, well sorted subangular to subrounded quartz grains, kaolinitic in part. Much interbedded light brown siltstone, brown and grey shale with traces of plant remains. Sandstone shows good intergranular porosity, no stain, questionable cut and fluorescence.

- 1670-1680 As above. Increase in shale content dark grey and brown, sub-fissile to blocky, non-calcareous. Sand shows porosity with faint fluorescence and cut.
- 1680-1730 Sandstone, light grey-brown, very fine to fine grained, subrounded to subangular, well sorted quartz grains, trace of glauconite. Poor intergranular porosity, no stain, cut or fluorescence. Much interbedded grey and dark grey shale.
- 1730-1740 Sandstone, pale grey, S&P, medium grained, subrounded to subangular, well sorted quartz grains. Fair intergranular porosity, no stain, cut or fluorescence. Much very pale brown, very fine grained to fine grained subangular, well sorted quartz sand. Tight. Much shale, as above.
- 1740-1770 Shale, grey and dark grey, sub-fissile to blocky, traces of brown shale. Much sandstone, as above cvg?
- 1770-1780 Sandstone, pale grey, S&P, fine to medium grained, fairly well sorted, subrounded to subangular quartz, minor chert grains.

 Trace of glauconite. Questionable trace of porosity, no stain, cut or fluorescence.
- 1780-1790 Sandstone, light brown, fine to medium grained, subrounded to subangular, fairly well sorted quartz, minor chert grains, kaolinitic. Trace of porous streaks, no stain, cut or fluorescence.
- 1790-1830 Shale, grey and dark grey, minor brown-grey shale, sub-fissile to blocky, trace of plant remains. Minor interbedded light brown siltstone and very fine sandstone, tight.
- 1830-1860 Shale, light grey, brown and grey, silty in part, blocky.

 Much dark grey shale, sub-fissile, micromicaceous. Minor interbedded siltstone and fine grained light brown sandstone,
 argillaceous.
- 1860-1870 Sandstone, light brown, very fine to fine grained, subangular, well sorted quartz grains, slightly argillaceous, grading to siltstone.
- 1870-1880 Shale, grey and dark grey, sub-fissile, micromicaceous in part. Traces of brown shale, plant remains. Sandstone, as above, grading to brown, very fine grained sandstone and siltstone.
- 1880-1890 Shale, grey and dark grey, sub-fissile, micromicaceous, silty in part. Trace of ironstone.
- 1890-1900 Shale, as above. Minor pale brown very fine grained sandstone and siltstone cvg?

- 1900-1930 Shale, dark grey to black, minor brown-grey shale, non-calcareous, sub-fissile, slightly bituminous, micromicaceous in part.
- 1930-1940 Shale, as above. Much very fine grained sandstone and siltstone as above, cvg?
- 1940-2140 Shale, grey and dark grey, sub-fissile to blocky, micro-micaceous, silty streaks, non-calcareous. Much black, slightly bituminous shale. Traces of ironstone, pyrite, chert pebbles.
- 2140-2180 Shale, dark grey, blocky to fissile, non-calcareous, micro-micaceous in part. Fine grey silty streaks, non-calcareous. Trace of ironstone.
- 2180-2190 Shale, as above. Trace of fine grained light grey quartz sand, subangular to subrounded, trace of kaolinitic. Fair intergranular porosity. No cut or fluorescence. Cvgs?
- 2190-2200 Grit conglomerate well rounded pebbles, grit size, green, grey, brown, bluish grey and black chert, some well polished, in a silicious, coarse sandstone matrix. Fair to good intergranular porosity, yellow-green fluorescence and cut.
- 2200-2210 Grit, as above. Friable. Trace of a glauconite. Fair porosity. Staining poor, due in part to the general brown color of the lithology. Fair to good fluorescence and cut.
- 2210-2220 Grit, as above. Porosity, fluorescence and cut.
- 2220-2230 As above. Porosity, fluorescence and cut.
- 2230-2240 As above. Increase in proportion of coarse sandstone matrix. Fluorescence and cut.
- 2240-2250 As above. Dark brown oil staining, fluorescence and cut.
- 2250-2260 Coarse sandstone grit, as above. Dark brown stain, cut and fluorescence.
- 2260-2268 No sample
- 2268-2286 Core #1 Recovered 18' (see Core Descriptions)
- 2286-2287 Drilled
- 2287-2317 Core #2 Recovered 30' (see Core Descriptions)
- 2317-2620 Shale, grey and dark grey, micromicaceous, sub-fissile, non-calcareous. Traces of brown, faintly calcareous ironstone concretion, siderite. Trace of pyrite. Few silty streaks, scattered calcareous shale streaks. Trace of subrounded chert pebbles.

- 2620-2630 Shale, grey, interbedded dark grey shale. Scattered varicolored chert grains, traces of pyrite, ironstone, plant remains, grey argillaceous limestone. Trace of glauconite.
- 2630-2640 Shale, as above. Trace of pale green and pale grey very pyritic shale.
- 2640-2650 Shale, grey, silty in part, non-calcareous, trace glauconitic. Limestone approx. 20%, dark brown-grey, argillaceous, dense. Trace of ironstone, chert grains, plant remains.
- 2650-2660 Shale, grey, silty, blocky, much glauconite. Minor interbedded dark grey shale, trace of light green waxy shale. Trace of ironstone, chert grains, pyrite.
- 2660-2670 Shale, silty, glauconitic, as above. Minor interbedded grey, argillaceous very fine grained sandstone.
- 2670-2680 Shale, grey, silty, glauconitic, blocky, non-calcareous.

 Traces of varicolored chert pebbles, bentonite, pyrite, ironstone.
- 2680-2700 Shale, as above. Traces of pale grey silty shale, pale grey bentonite.
- 2700-2710 Shale, grey, silty, non-calcareous, blocky, grading in part to argillaceous siltstone, glauconitic.
- 2710-2720 Shale, as above, silty, glauconitic. Interbedded grey-brown fine to medium grained argillaceous, glauconitic sandstone.

 Much loose, rounded, fairly well sorted sand grains.
- 2720-2740 Shale, grey, silty and sandy, glauconitic. Trace of pyrite, chert grains. Trace of brown, argillaceous, glauconitic limestone.
- 2740-2750 Shale, grey, silty, blocky, few silty streaks.
- 2750-2760 Shale, grey, silty, blocky. Trace of grey argillaceous limestone. Traces of pale brown sandy and silty dolomite.
- 2760-2770 Shale, as above. Much pale brown dolomite, as above. Trace of grey, argillaceous, glauconitic limestone.
- 2770-2810 Shale, silty, grey, blocky, slightly glauconitic. Minor pale brown sandy and silty dolomite. Traces of grey, argillaceous limestone.
- 2810-2850 Shale, as above. Trace only of dolomite, as above.
- 2850-2860 Shale, grey, silty, non-calcareous, blocky. Much pyritic and glauconitic shale.

- 2860-2870 Glauconitic, pyritic shale, as above. Shale, dark brown grey, soft, fissile, non-calcareous. Chert light grey to black, coarse pebbles in silicious, sandy, glauconitic matrix.
- 2870-2877 Circulated sample. Shale and chert, as above. Sandstone, light grey, medium grained, fairly well sorted subrounded to subangular, vitreous quartz grains. Streaks of fair to good intergranular porosity, brown oil stained, fluorescence, cut.
- 2877-2937 Core #3 Recovered 58.5' (see Core Descriptions)
- 2937-2950 Sandstone, pale grey, very calcareous, grading to very sandy limestone. Fine to medium grained, scattered coarse grains of subangular to subrounded quartz and chert. Traces of porous, oil stained sandstone cavings?
- 2950-2960 Shale, brown and dark brown, very calcareous, in part an argillaceous limestone.
- 2960-3010 Limestone, brown and dark brown, argillaceous, grading to a very limey shale.
- 3010-3030 Limestone, as above. Trace of Brachiopod? fragments.
- 3030-3040 Limestone, brown and dark brown, argillaceous. Shale, dark brown to black, slightly calcareous, bituminous, trace of pyrite. Trace of fossil shells, crinoids.
- 3040-3050 Shale, as above. Traces of shell fragments, crinoids. Minor interbedded brown, argillaceous, silty limestone.
- 3050-3060 As above shaly limestone marl, dark brown and brown. Traces of fossil fragments.
- 3060-3070 Limestone, brown, dense, slightly argillaceous, silty. Trace of brown micritic limestone. Much dark brown, bituminous, calcareous shale. Scattered crinoid fragments, shell fragments. Trace of oil stain on fracture surface.
- 3070-3080 Limestone, brown, argillaceous, trace silty, grading to brown and light grey speckled marl. Minor dark brown calcareous, bituminous shale. Traces of fossil fragments.
- 3080-3130 Limestone marl, as above, fossiliferous. Trace silty minor dark brown interbedded bituminous, calcareous shale.
- 3130-3150 Marl, as above. Trace of fine chert pebbles.
- 3150-3160 Marl, as above. Fossil fragments crinoids, echinoid spines, shell fragments.
- 3160-3170 Marl, as above, argillaceous, bituminous, fossiliferous.

- 3170-3180 Marl, as above, brown and dark brown. Trace of fossils, echinoid spines.
- 3180-3190 Marl, as above. Chert, pale grey, massive, some rounded pebbles in a calcareous sandy matrix. Sandstone, pale grey, fine to medium grained, very calcareous, grading to sandy limestone approx. 10%.
- 3190-3200 Chert, pale grey, massive, replacing brown microcrystalline, silicious dolomite. Minor pale grey, fine to medium sandy limestone. Dolomite shows fluorescence and cut.
- 3200-3210 Limestone, pale grey, fine to medium sandy and silty. Chert, pale grey and grey, replacing and grading into limestone and into brown, silicious dolomite. Dolomite shows cut and fluorescence. Traces of fractures, calcite lined, oil stained, cut and fluorescence.
- 3210-3214 (Circulated before trip.) Dolomite, calcareous, dark brown, microcrystalline, silicious. Chert, dark brown, massive splintery. Limestone, brown, slightly argillaceous, partly replaced by pale grey chert, silty, argillaceous. Trace of fracture porosity, oil stain, cut and fluorescence.
- 3214-3220 As above. Much cavings.
- 3220-3240 Limestone, brown-grey and brown, micritic, silicious in part, faintly argillaceous. Minor dark brown and pale grey splintery chert. Trace of fossil shells.
- 3240-3250 Chert, massive, grey and pale grey 50%. Limestone, pale grey, sandy, silty, silicious in part 50%.
- 3250-3260 Limestone, pale grey, sandy, silty. Minor pale grey and grey splintery chert. Traces of brown oil stain, cut, fluorescence, along fractures.
- 3260-3285 Chert, grey, massive, splintery, much darker grey and brown chert, finely spicular 60%. Limestone, pale grey, fine sandy 40%. Traces of oil staining on fracture surfaces.
- 3285-3300 Dolomite, brown, microcrystalline, compact, silicious, trace of fractures. Porosity very fine intercrystalline, fluorescence, cut.
- 3300-3320 Limestone, dolomitic, grey-brown and brown, faintly argillaceous, microcrystalline to micritic, dense, silicious in part. Minor dark brown and grey chert. Traces of fractures, oil stained, cut, fluorescence.
- 3320-3330 Limestone, grey-brown and brown, microcrystalline, argillaceous, dense. Trace of fossil fragments. Chert, pale grey, trace of brown chert approx. 20%. Trace of fractures, calcite lined, oil stained, cut, fluorescence.

- 3330-3340 Chert, pale grey, splintery 50%. Limestone, pale grey, fine to medium sandy, silicious in part. Scattered grey and dark grey, coarse subrounded chert grains approx. 50%. Streaks of leached sand porosity, poor to fair, oil stain, fluorescence, cut.
- 3340-3350 Chert, as above. Fractures, bitumen lined dead oil stained.

 Limestone, pale grey, microcrystalline to earthy. Fair intercrystalline porosity, bitumen infilled. Fluorescence, cut.
 Traces of brown, microcrystalline dolomite, light oil stain,
 fluorescence and cut.
- 3350-3395 Chert, pale grey, spicular in part. Much dense, brown-grey chert. Minor brown dolomitic, slightly argillaceous microcrystalline limestone. Trace of fractures.
- 3395-3410 Sandstone, pale grey, medium to coarse grained, poorly sorted subangular quartz and chert grains, abundant (20%) calcareous cement. Streaks of leached sandstone, good intergranular porosity, dead oil stain and bitumen, cut and fluorescence.
- 3410-3420 Sandstone, pale grey, medium to coarse grained, abundant chert grit, subangular to subrounded, poorly sorted, in a very calcareous cement. Tight.
- 3420-3430 Sandstone, brown-grey, medium grained, fairly well sorted quartz and chert grains in a lime matrix. Traces of intergranular porosity, oil stain, bitumen infilled, cut and fluorescence. Limestone, pale grey, silicious in part, microcrystalline, slightly silty, tight.
- 3430-3440 Interbedded, intergradational sandstone and sandy limestone, as above. Fair, leached intergranular porosity, part bitumen infilled. Dead oil stain, cut, fluorescence.
- 3440-3450 Sandstone, as above. Much loose quartz and chert grains.

 Streaks of fair intergranular porosity, partially bitumen infilled. Dead oil stain, cut, fluorescence.
- 3450-3460 Sandstone, grey, medium to coarse grained, very calcareous, subrounded to subangular quartz and chert grains, scattered chert grit, in limestone matrix. Good intergranular porosity where matrix is leached, partly bitumen infilled.

 Dead oil stain, good cut, fluorescence.
- 3460-3470 Dolomite, brown, dense to microcrystalline, tight. Much pale grey, spicular and dense chert. Much loose sand grains. Trace of fracturing, oil staining in the dolomite.
- 3470-3510 Limestone, pale grey, microcrystalline, compact pelletoid texture. Trace silty, sandy. Much chert (40%), pale grey, pelletoid, spicular, altered limestone. Trace of fractures with oil stain, cut, fluorescence.

- 3510-3530 Limestone, grey-brown, microcrystalline to very fine crystalline, compact, silicious in part 40%. Chert, pale grey and brown, massive, splintery. Minor dark brown chert.
- 3530-3600 Limestone, light brown and brown, microcrystalline to very fine crystalline, compact, silicious in part 60%. Chert, brown and grey-brown, massive, splintery 40%. Trace of calcite lined fractures. No stain.
- 3600-3640 Limestone, light brown, microcrystalline, silicious in part, much brown, micritic, faintly argillaceous limestone 70%.

 Chert, brown and grey-brown, minor pale brown spicular chert 30%.
- 3640-3660 Limestone, as above, brown, micritic, slightly argillaceous.

 Much pale brown-grey microcrystalline limestone, earthycrystalline, faintly argillaceous. Chert, grey and dark browngrey, splintery 20%
- 3660-3690 Limestone, as above 60%. Chert, as above - 40%. Trace of black shale partings.
- 3690-3740 Chert, grey-brown and dark brown 50%.

 Limestone, pale grey and brown, as above 50%. Traces of argillaceous partings and laminae.
- 3740-3760 Limestone, pale grey, microcrystalline to very fine crystalline, compact, cherty chert is pale grey 60%. Limestone, brown and dark brown, micritic, faintly argillaceous 20%. Chert, brown and dark brown, splintery 20%.
- 3760-3780 Limestone, pale grey and pale brown, microcrystalline, compact, silicious in part, slightly argillaceous, 80%. Chert, pale brown, splintery, finely spicular in part, much brown chert, 20%. Trace of grey, calcareous shale laminae. Trace of calcite-filled fractures.
- 3780-3810 Limestone, as above 70%. Chert, as above - 30%. Trace of dark brown very argillaceous limestone.
- 3810-3830 Limestone, as above, pale grey and light brown, microcrystalline to dense, silicious, faintly argillaceous 50%. Chert, grey, massive, splintery.
- 3830-3860 Limestone, as above, pale brown, microcrystalline, and brown micritic 50%. Chert, pale grey, spicular in part. Much dark brown blocky to splintery chert 50%.
- 3860-3890 Limestone light grey to light brown, microcrystalline to very fine crystalline, silicious, trace silty to argillaceous laminae limestone, dark brown to grey. Chert, dark grey to light grey, conchoidal to rectangular fracture, trace of spicular chert. Limestone approx. 60%, Chert approx. 40%.

3890-4010 - As above, trace light brown silicious limestone, very fine crystalline, some of these chips show slight fluorescence with chlorothene.

4010-4123 - Limestone, as above.

- (1) Trace argillaceous limestone.
- (2) Trace dark grey sh., very slightly calcareous.
- (3) Trace of silty to very fine grained sandy limestone.

T.D. - 41231

(e) Paleontological Determinations

Down to -2279' - Upper Albian) Microflora 2283' - 2886' - Lower & Middle Albian) Microflora 2903' and on - Carboniferous (scolecodonts)
No further determination.

SECTION III - ENGINEERING SUMMARY

(a) Report of Drill-Stem Tests

DST #1: 2197' - 2268' : Bottom hole test

Zone: Cretaceous - Orange Marker
Times: Preflow 5 mins. - VO 90 mins.
ISI 45 mins. - FSI 150 mins.

GTS in 4 min. on preflow - GTS immediately on VO at

280 MCF decreasing to 144 MCF in 30 mins.

Recovered: 140' of drilling mud
Pressures: IHP 1296 FHP 1292
ISIP 1168 FSIP 1160

IFP 109 FFP 182

Remarks: BHT - 78°F

Test satisfactory

DST #2: 2268' - 2286' : Bottom hole test

Zone: Cretaceous - Orange Marker
Times: Preflow 5 mins. - V090 mins.
ISI 45 mins. - FSI 150 mins.

GIP on preflow - fair air blow decreasing to weak in

15 mins. and remaining faint throughout test.

Recovered: 20' of drilling mud

HP 1325 FHP 1317

ISIP 310 FSIP 555

HP 37 FFP 38

Remarks: BHT - 78°F

Test satisfactory

DST #3: 2870' - 2937' : Bottom hole test

Zone: Chance

Times: Preflow 5 mins. - VO 120 mins. ISI 45 mins. - FSI 240 mins.

Good air blow on preflow - GTS on VO in 7 mins.

TSTM remaining for 70 mins. then died.

Recovered: 2800' of fluid

60' of drilling mud

2740' sulphurous gas cut water

Pressures: IHP 1727 FHP 1712

ISIP 1259 FSIP 1262 IFP 730 FFP 1256

Remarks: BHT 96°F

Test satisfactory. Tool was chased 2' during test period.

DST #4: 3180' - 3214' : Bottom hole test

Zone: Chance Ss.

<u>Times</u>: Preflow 5 mins. - VO 90 mins. ISI 45 mins. - FSI 150 mins.

GIP - fair air blow to weak in 15 mins. - faint and

intermittent in 60 mins.

Recovered: 50' of drilling fluid
Pressures: IHP 1897 FHP 1888
ISIP 78 FSIP 244

ISIP 78 FSIP 244 IFP 40 FFP 42

Remarks: BHT 80° F

Test satisfactory

DST #5: 3300' - 3499' : Bottom hole test

Zone: Mississippian Limestone

Times: Preflow 5 mins. - VO 90 mins.

ISI 45 mins. - FSI 150 mins.

GIP - good air blow decreasing to weak in 40 mins.

continuing to weaken to end of test. No GTS.

Recovered: 90' of drilling fluid Pressures: IHP 1909 FHP 1899

ISIP 821 FSIP 769

IFP 46 FFP 81

Remarks: BHT 79°F

Test satisfactory

DST #6: 1580' - 1634' : Straddle test

Zone: Blackie Ss.

Times: Preflow 5 mins. - VO 90 mins. ISI 45 mins. - FSI 150 mins.

GIP - good air blow decreasing to weak in 30 mins. and

faint at end of test. No GTS.

Recovered: 765' of fluid

20' of drilling fluid

745' of water

Pressures: IHP 890 FHP 892

ISIP 399 FSIP 401

IFP 180 FFP 387

Remarks: BHT 73°F

Test satisfactory

This test was a straddle conventional.

Note: Service company test reports in back folder.

(b) Casing Record

Conductor Pipe

25' of 23" OD 3/16" wall insulated conductor pipe with 3/4" OD cooling coils. 26' of 19" OD 3/16" wall conductor pipe set at 51' below ground or 69' KB.

Conductor pipe cemented with 120 sax of permafrost (cold set) cement.

Surface Casing

Ran 26 joints (833.00') of 13-3/8", 54.5#, K-55, 8rd, new, seamless, ST&C, Rge 2 casing landed at 823.00 KB.

Cemented casing with 850 sax of construction cement plus 3% CaCl₂. Cement in place at 5:20 hours December 4, 1971.

Circulated approximately 130 sax of excess cement.

No intermediate and no production casing strings were run.

(c) Bit Record

See attached Bit Record sheet.

(d) Mud Report

Surface Hole

The 17-1/2" surface hole was drilled from 68' KB to 826' using stable foam as the drilling fluid. At 826' the hole was filled with a water gel mud. The following materials were used on surface:

Sulfotex Sal	3.5	drums
Aluminium Stearate	2	boxes
Ge1	121	sax
Fibertex	3 0	sax
Sawdust	70	sax
Caustic	2	sax

Main Hole

The main hole was drilled using a gel water system to 2145' and was then displaced to an XC polymer system and was continued throughout the remainder of the hole. The following materials were used on the main hole:

Magcobar	1157	sax
Magcoge1	310	sax
Caustic Soda	19	sax
Bicarbonate of Soda	2	sax
Kelzan	23	sax
Plaster	4	sax
Sawdust	20	sax
Pipelax ,	2	bbls.

(e) Deviation Record

92 - 0	840 - 3/4	1388 - 1/2	2268 - 1 - 3/4	3285 - 1 - 3/4
280 - 3/8	862 - 1/2	1482 - 1/2	2286 - 1-3/4	3307 - 2
360 - 3/8	892 - 1	1575 - 1/2	2374 - 1-1/2	3345 - 1-1/2
435 - 1/2	924 - 1/2	1670 - 3/4	2432 - 1 - 1/8	3379 - 1-1/4
465 - 1/2	956 - 3/4	1770 - 1/4	2518 - 7/8	3440 - 1-1/8
485 - 1/2	998 - 1/2	1862 - 1	2720 - 1/2	3499 - 2
550 - 1/2	1070 - 7/8	1925 - 3/4	2813 - 1/2	3527 - 1-1/2
620 - 3/8	1135 - 7/8	2020 - 3/4	2937 - 1/2	3568 - 1-1/4
674 - 1/4	1198 - 3/4	2110 - 1-1/4	3030 - 3/4	3630 - 1
780 - 1/4	1261 - 7/8	2145 - 2	3095 - 1/8	3757 - 1
824 - 1/8	1325 - 3/4	2205 - 1 - 1/2	3214 - 1-1/4	4015 - 1-1/4

(f) Abandonment Plugs

Plug #1 (3010'-2810') 110 sax construction cement plus 3% CaCl₂. Felt @ 2780'
Plug #2 (2340'-2130') 110 sax construction cement plus 3% CaCl₂. " 2090'
Plug #3 (1820'-1490') 140 sax construction cement plus 3% CaCl₂. " 1485'
Plug #4 (990'- 770') 175 sax construction cement plus 3% CaCl₂. " 765'
Surface plug 5 sax construction cement.

(g) Lost Circulation Zones

After mudding up at 826' on the 17-1/2" surface hole, circulation was lost. Approximately 100 bbls. of mud was lost in the Eagle Plain formation. Circulation was regained by mixing a pill of sawdust, gel, and fiberseal.

While stuck in hole at 1674' partial lost circulation was observed in the Blackie Ss. Approximately 60 bbls. was lost. Full circulation was regained when pipe came free and mud was displaced to XC polymer system. No other zones of lost circulation were encountered throughout the remainder of the hole.

(h) Report of Blowouts

- At a depth of 2268' (Orange Marker 2195') while changing shale shaker screens, the well started kicking. No pressure on standpipe initially, 250 psi on casing side after closing hydril.
- Circulated through adjustable choke holding 300 psi back pressure. Standpipe pressure while pumping was 400-550 psi. Circulated and raised mud weight to 11#/gal. After kick was controlled a DST was run to evaluate (see DST #1).
- A formation pressure breakdown test was run prior to cement plug #4 (990'-770') across the surface casing shoe at 823' KB. Formation broke down at 750 psi and fed at 1/2 bb1. per minute at 650 psi. Instantaneous standing pressure at 550 psi. Bled to 350 psi in 5 minutes. Mud weight was 9.5#/gal. and viscosity 90 sec./qt.

SECTION IV - LOGS

The following Schlumberger logs were run on January 9-10, 1972:

Dual Induction Laterolog (4109 - 823')
BHC Sonic/Gamma Ray/Caliper (4109 - 823')
Formation Density (Compensated) (4111 - 823')
SNP Log (4110 - 823')
Tried to run Microlog (2 runs unsuccessful)

24 Sidewall Cores were shot and 20 were recovered as follows:

1.	28551	13.	1809'	Not Recovered
2.	2720'	14.	1729'	
3.	2675'	15.	1653'	Not Recovered
4.	26351	16.	י 1589	Not Recovered
5.	2535 1	17.	1529†	
6.	2447 '	18.	1437	
7.	2370 1	19.	1375'	
8.	2178'	20.	1300'	
9.	2158'	21.	1214'	
10.	2063 '	22.	1098	
11.	1980'	23.	1012	
12.	1908	24.	905'	Not Recovered

SECTION V - ANALYSIS

- (a) <u>Core Analysis</u>

 Core analysis enclosed in back folder.
- (b) Water Analysis
 Water analysis enclosed in back folder.
- (c) <u>Gas Analysis</u>

 Gas analysis enclosed in back folder.
- (d) <u>Oil Analysis</u>

 No oil analysis.

SECTION VI - COMPLETION SUMMARY

(a) Tubing Record

No tubing run.

(b) Perforation Record

No perforations.

(c) Cementation Record

Abandonment Plug #1 (3010' - 2810')

Cemented with 110 sax construction cement plus 3% CaCl₂. Cement in place at 5:10 hours January 13, 1972. Felt plug #1 at 2780' at 17:10 hours, after 12 hours WOC.

Abandonment Plug #2 (2340' - 2130')

Cemented with 110 sax construction cement plus 3% CaCl₂. Cement in place at 18:55 hours January 13, 1972. Felt plug #2 at 2090' at 4:00 hours, after 9 hours WOC.

Abandonment Plug #3 (1820 ' - 1490')

Cemented with 140 sax construction cement plus 3% CaCl₂. Cement in place at 6:35 hours January 14, 1972. Felt plug #3 at 1485' at 17:00 hours, after 10 hours WOC.

Abandonment Plug #4 (990' - 770')

Cemented with 140 sax construction cement plus 3% CaCl₂. Cement in place at 21:40 hours January 14, 1972. Felt plug #4 at 765' at 8:00 hours after 10-1/2 hours WOC. Surface plug - cut off casing at original ground level and cemented top of casing with 5 sax of cement. Welded on casing plate and well identifier sign.

(d) Acidization and Fracturing Record

No acidizing or fracturing operations,

(e) Back Pressure and Production Tests

No back pressure or production tests.

CHEVRON STANDARD LIMITED BIT RECORD

WELL NAME Chev. SOBC WM W. PARKIN

CONTRACTOR G. F

RIG No.

PUMP No 1 C-350

1-1/7 1-1/4 1-1/4 1-3/1-17 1/2 1-3/ 3/8 1/4 3/4 DEY. 1/2 إح COND TO. --J ----------أيسم 0 0 o C-250 4 ~. ŝ 5 DULL ∞ C 4 CI ٥ 9 Ωį 4 4 CI. C Š CΙ, 4 O 4 4 S O0 11.1 65 PUMP No. 2 ΧiS 34 40 99 65 2 89 80 10.8|7011.0 68 11.3|7411.2 75 11.2 75 11.1 65 11.1 70 11.152QO M Water 11.3 Foam 11,1 11.3 11.3 Foam 11.0 9. ₹ S AN Cone Reaming Reamed-30 ft. 1500 Lost One DP ANN. 1000 On Iron 41 AT BIT HE 950 1000 450 900 006 750 1200 1250 1500 006 1750 850 1050 1050 1450 PUMP PSI 1450 DRILLING DAYS SPR No. 2 PUMP INER SPM 56 45 42 56 No.1 PUMP 56 55 58 56 42 56 52 52 56 54 54 27 54 LINER ري 1% آ ᅜ 10; 10; 774 January 15, 1972 7% 75. 5 70 2 9 9 0 0 0 55 2 75 55 50 R M 55 5 80 50 55 ر ا 85 5 84 55 50 WEIGHT 8 - 11* 10 5-8 202 2 2 ရွ 2 10 35 25 35 ∞ 12 35 35 35 35 JET VEL NOZZLE SIZES Open Open 3-10 3-10 3-10 2-10 1-12 Open 3-12 2-10 2-10 1-11 2-10 1-12 3-12 RIG RELEASED 3-10 1 - 123-12 3-12 Reamed Core Hole 2-10 3 2.5 0 2.5 12 4 ORLG. RATE 't/hr 16 13 30 19-3/416 13 29 108 17-3/4 6 ന 9 288 19-3/4 272 22% TIME 5,72 겼 46 2 25 * 160 26% 60 213 60 143 277 305 52% 7 33 OOTAGE 320 18 1299 30 191 104 123 87 402 20 352 4 826 8-3/4STIAG2877 2937 722_ 2605 2877 846 3855 4015 2286 402 846 2145 2145 2268 2268 2286 2317 2605 3412 3499 2287 2317 2877 2937 2937 3214 3855 2286 2287 3221 2 3499 3851 4015 4123 DEPTH 197 . 722 3214 3851 402 3221 oscid 826 3412 FROM 0 29 oscid 8-3/4SDGH OSCIC Smith8-3/4SDGH emith 8-3/4SDGH 8-3/4H88 8-3/4SDGF 8-3/4338 6-3/16 0 6-3/16 0 8-3/4488 OSC Sm1th8-3/43JS 8-3/43JS 8-3/4588 8-3/4H88 6-3/16 RR115mith 8-3/43JS 8-3/4H77 8-3/41188 TYPE November $12\frac{1}{2}$ 173 SIZE 172 Smith Smith Smith smith WDRR W.D. 0 REED HIC SEC HTC HTC MAKE HIC SEC_ DATE SEC) () SEC လ ဩ SPUD RR6 IA 記義 16 2A 34 83 20 7

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