ORIGINAL

POST WELL REPORT

15-135-24024-0100

ENSIGN OIL & GAS
SHEARER #1-26H
NESS COUNTY, KANSAS
SEC. 26-T17S-R25W

September 8, 1997

PREPARED FOR: MR. REED WACKER

HALLIBURTON

The Future Is Working Together.

WELL HISTORY

ENSIGN OPERATING COMPANY

SHEARER "B" 1-26H

NE NE NW SEC. 26, T17S, R25W
Surface Loc. 2310' FWL 100' FNL
Bottom Hole Loc. 2187' FWL 1844' FNL

NESS COUNTY, KANSAS

BY
CHARLES W. COOK
CONSULTING GEOLOGIST

HALLIBURTON

POST WELL SUMMARY

From August 22, 1997 To September 4, 1997

Job No.:
Operator: **ENSIGN OIL & GAS**
Field: **SHEARER #1-26H**
Well: **shearer**

AFE No.: **SEC. 26-T17S-R25W**
Location: **NESS COUNTY, KANSAS**
MWD Operator(s): **Robby Browning**
Dir'l Driller(s): **Steve Martin, Alton Stubblefield**

Company Man: **Richard O. Berg**

FOOTAGE DRILLED	DRILLING HOURS	AVERAGE ROP	DRILLING DAYS	AVERAGE FTG/DAY	AVERAGE DRILLING HRS/DAY
1967.00	103.33	19.04	14.83	132.62	6.97

RUN NO.	BHA NO.	DEPTH IN	ANGLE IN	DEPTH OUT	ANGLE OUT	FOOTAGE DRILLED	DRILLING HOURS	AVERAGE ROP	AVERAGE BUILD	FLOW gpm	ON-BOTTOM psi	MAX. BH TEMP °F	MOTOR SERIAL NO.
0	0	0.00	------	0.00	------	0.00	0.00	0.00	------	225	0	0.00	N/A
1	1	4046.00	1.69	4070.00	5.14	24.00	1.75	13.71	14.36	225	994	0.00	HT-64168
1	2	4070.00	5.14	4228.00	25.82	158.00	11.00	14.36	13.09	225	1200	0.00	HT-64168
1	3	4228.00	25.82	4622.00	83.91	394.00	36.25	10.87	14.74	225	1200	0.00	HT-64168
1	4	4622.00	83.91	4622.00	83.91	0.00	0.00	0.00	------	225	1200	0.00	TM-47007
1	5	4622.00	83.91	4935.00	90.20	313.00	14.33	21.84	2.01	225	1336	0.00	TM-47007
1	6	4935.00	90.20	6013.00	------	1078.00	40.00	26.95	------	225	1400	0.00	TM-47015

RUN NO.	BHA NO.	BIT SIZE(in)	BIT MODEL	BIT NOZZLES (/32nd)	MOTOR DESCRIPTION	STAB O.D.	DISTANCE CTR TO BIT	REASON FOR TRIP
0	0	------	------	------	NO MOTOR	------	------	<undefined>
1	1	8-3/4"	F-2H P SRT	15 15 15	6-1/2" SLO-SPEED 5/6 X 2.38° bend	------	------	MWD - MWD
1	2	8-3/4"	F-2H P SRT	15 15 15	6-1/2" SLO-SPEED 5/6 X 2.38° bend	------	------	MWD - MWD
1	3	8-3/4"	F-2H P SRT	16 16 16	6-1/2" SLO-SPEED 5/6 X 2.38° bend	------	------	TD - Total depth/Casing point
1	4	6-1/4"	F-4P srt	18 18 18	4-3/4" F2000M X 1.15° bend	------	------	MWD - MWD
1	5	6-1/4"	F-4P srt	18 18 18	4-3/4" F2000M X 1.15° bend	------	------	PR - Penetration rate
1	6	6-1/4"	F-4P srt	18 18 18	4-3/4" F2000M X 1.83° bend	------	------	TD - Total depth/Casing point

RUN NO.	BHA NO.	SLIDE FTG	ROTATE FTG	SLIDE HRS	ROTATE HRS	SLIDE ROP	ROTATE ROP	CIRCULATE HRS	COMMENTS
0	0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	Stand-By
1	1	24.00	0.00	1.75	0.00	13.71	0.00	3.50	Build Horizontal Curve to 90° for Casing Point
1	2	128.00	30.00	8.25	2.75	15.52	10.91	1.75	Build Horizontal Curve to 90° for Casing Point
1	3	394.00	0.00	36.25	0.00	10.87	0.00	9.25	Build Horizontal Curve to 90° for Casing Point
1	4	0.00	0.00	0.00	0.00	0.00	0.00	0.25	Drill 1600' of Horizontal Extension.
1	5	129.00	184.00	5.67	8.67	22.76	21.23	1.50	Drill 1600' of Horizontal Extension.
1	6	97.00	981.00	8.67	31.33	11.19	31.31	16.42	Drill 1600' Horizontal Extension

Halliburton Drilling Systems

Survey Report

Date: 9/8/97
Time: 10:21 am
Wellpath ID: shearer
Date Created: 8/23/97
Last Revision: 9/8/97

Calculated using the Minimum Curvature Method
Computed using WIN-CADDS REV2.2.2
Vertical Section Plane: S 5.00 W

Survey Reference: WELLHEAD
Vertical Section Reference: WELLHEAD
Closure Reference: WELLHEAD
TVD Reference: WELLHEAD

ENSIGN OIL & GAS
SHEARER # 1-26H
NESS COUNTY, KANSAS
SEC. 26-T17S-R25W

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	DLS (dg/100ft)
3985.00	0.30	N 43.70 W	0.00	3985.00	0.00	0.00 N	0.00 E	0.00
4017.00	0.20	S 86.90 W	32.00	4017.00	-0.05	0.06 N	0.11W	0.71
4048.00	1.80	S 16.60 W	31.00	4047.99	0.44	0.41 S	0.31W	5.62
4079.00	6.50	S 16.50 W	31.00	4078.90	2.63	2.56 S	0.94W	15.16
4111.00	11.60	S 14.10 W	32.00	4110.50	7.59	7.42 S	2.24W	15.98
4143.00	16.70	S 12.80 W	32.00	4141.52	15.33	15.03 S	4.05W	15.97
4174.00	19.90	S 12.90 W	31.00	4170.94	24.97	24.52 S	6.21W	10.32
4206.00	22.70	S 14.50 W	32.00	4200.75	36.45	35.81 S	8.97W	8.94
BHA #3 @ 4228' = 6 1/2" SLO SPEED __ F-2HP srt								
4237.00	27.10	S 13.40 W	31.00	4228.87	49.35	48.47 S	12.11W	14.27
4268.00	32.00	S 12.10 W	31.00	4255.83	64.49	63.38 S	15.47W	15.94
4300.00	37.20	S 10.70 W	32.00	4282.16	82.54	81.19 S	19.05W	16.44
4331.00	41.90	S 10.00 W	31.00	4306.05	102.19	100.61 S	22.59W	15.23
4362.00	46.70	S 9.10 W	31.00	4328.23	123.77	121.95 S	26.17W	15.62
4394.00	51.40	S 7.20 W	32.00	4349.20	147.89	145.87 S	29.58W	15.36
4425.00	56.70	S 6.80 W	31.00	4367.40	172.96	170.77 S	32.63W	17.13
4457.00	61.70	S 7.50 W	32.00	4383.78	200.42	198.03 S	36.06W	15.74
4487.00	67.10	S 7.30 W	30.00	4396.73	227.44	224.85 S	39.54W	18.01
4517.00	72.10	S 6.50 W	30.00	4407.19	255.54	252.76 S	42.92W	16.85
4549.00	77.10	S 4.70 W	32.00	4415.68	286.37	283.45 S	45.92W	16.54
TOP OF WARSAW FORMATION								
4570.98	80.25	S 2.94 W	21.98	4420.00	307.92	304.95 S	47.35W	16.34
4579.00	81.40	S 2.30 W	8.02	4421.28	315.83	312.86 S	47.71W	16.36
BHA #5 @ 4622' = 1.15° 4 3/4" F2000M__F-4P srt								

Halliburton Drilling Systems

Survey Report

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	DLS (dg/100ft)
4627.00	84.20	S 1.10 W	48.00	4427.29	363.37	360.46 S	49.13W	6.34
4659.00	86.50	S 1.50 W	32.00	4429.89	395.19	392.34 S	49.85W	7.29
4691.00	88.70	S 1.50 W	32.00	4431.23	427.10	424.30 S	50.69W	6.87
4723.00	90.40	S 1.50 W	32.00	4431.48	459.04	456.29 S	51.52W	5.31
4755.00	91.20	S 1.30 W	32.00	4431.03	490.97	488.27 S	52.31W	2.58
4787.00	92.40	S 1.20 W	32.00	4430.03	522.89	520.25 S	53.00W	3.76
4819.00	91.90	S 0.80 W	32.00	4428.83	554.79	552.22 S	53.56W	2.00
4851.00	89.90	S 0.70 W	32.00	4428.33	586.69	584.21 S	53.98W	6.26
4883.00	90.20	S 0.80 W	32.00	4428.30	618.61	616.21 S	54.40W	0.99
4915.00	90.70	S 1.20 W	32.00	4428.05	650.53	648.20 S	54.96W	2.00
BHA #6 @ 4935' = 1.83° 4 3/4" F2000M__F-4P srt								
4947.00	89.90	S 2.20 W	32.00	4427.88	682.47	680.19 S	55.91W	4.00
4979.00	88.60	S 3.30 W	32.00	4428.30	714.45	712.15 S	57.44W	5.32
5010.00	88.80	S 2.90 W	31.00	4429.00	745.42	743.10 S	59.12W	1.44
5042.00	88.60	S 3.40 W	32.00	4429.73	777.39	775.04 S	60.88W	1.68
5073.00	88.50	S 3.40 W	31.00	4430.51	808.37	805.97 S	62.71W	0.32
5105.00	88.10	S 2.90 W	32.00	4431.46	840.34	837.91 S	64.47W	2.00
5137.00	89.10	S 3.50 W	32.00	4432.24	872.32	869.85 S	66.26W	3.64
5170.00	89.80	S 4.00 W	33.00	4432.56	905.31	902.78 S	68.42W	2.61
5201.00	90.00	S 4.10 W	31.00	4432.61	936.30	933.70 S	70.60W	0.72
5233.00	90.20	S 4.00 W	32.00	4432.56	968.30	965.62 S	72.86W	0.70
5265.00	89.80	S 3.60 W	32.00	4432.56	1000.29	997.55 S	74.99W	1.77
5297.00	89.70	S 3.90 W	32.00	4432.70	1032.28	1029.48 S	77.08W	0.99
5330.00	90.00	S 3.80 W	33.00	4432.78	1065.28	1062.41 S	79.29W	0.96
5362.00	90.30	S 3.40 W	32.00	4432.70	1097.27	1094.34 S	81.30W	1.56
5393.00	90.70	S 3.80 W	31.00	4432.43	1128.26	1125.28 S	83.25W	1.82
5425.00	90.70	S 3.70 W	32.00	4432.04	1160.25	1157.21 S	85.34W	0.31
5457.00	90.40	S 4.10 W	32.00	4431.73	1192.24	1189.13 S	87.52W	1.56
5489.00	89.50	S 3.70 W	32.00	4431.76	1224.23	1221.06 S	89.70W	3.08
5521.00	88.00	S 4.10 W	32.00	4432.46	1256.22	1252.98 S	91.87W	4.85
5552.00	87.90	S 4.60 W	31.00	4433.57	1287.20	1283.87 S	94.22W	1.64
5584.00	87.40	S 3.80 W	32.00	4434.88	1319.16	1315.76 S	96.56W	2.95
5616.00	87.20	S 3.70 W	32.00	4436.39	1351.12	1347.65 S	98.65W	0.70
5648.00	87.50	S 3.70 W	32.00	4437.86	1383.08	1379.55 S	100.72W	0.94
5680.00	87.80	S 4.90 W	32.00	4439.18	1415.05	1411.43 S	103.11W	3.86
5712.00	87.40	S 4.20 W	32.00	4440.52	1447.02	1443.30 S	105.65W	2.52

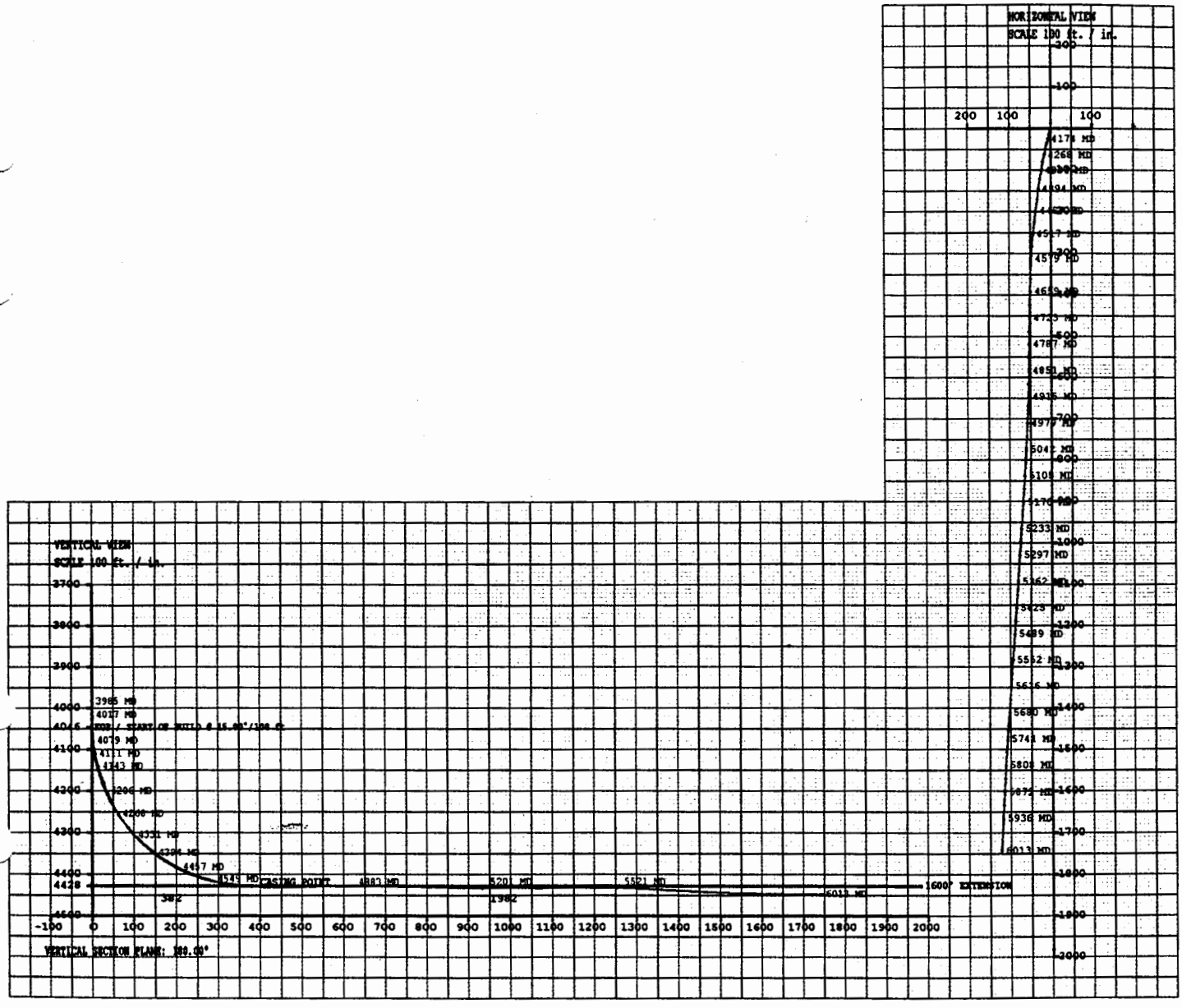
Halliburton Drilling Systems

Survey Report

Measured Depth (ft)	Incl (deg.)	Drift Dir. (deg.)	Course Length (ft)	TVD (ft)	Vertical Section (ft)	TOTAL Rectangular Offsets (ft)	(ft)	DLS (dg/100ft)
5744.00	87.30	S 4.00 W	32.00	4442.00	1478.98	1475.19 S	107.94W	0.70
5776.00	87.50	S 3.90 W	32.00	4443.45	1510.94	1507.08 S	110.14W	0.70
5808.00	88.50	S 3.20 W	32.00	4444.56	1542.91	1539.00 S	112.12W	3.81
5840.00	88.90	S 3.00 W	32.00	4445.29	1574.89	1570.94 S	113.85W	1.40
5872.00	88.30	S 2.80 W	32.00	4446.07	1606.86	1602.89 S	115.47W	1.98
5904.00	88.60	S 2.60 W	32.00	4446.94	1638.82	1634.84 S	116.97W	1.13
LAST SURVEY @ 5936'								
5936.00	89.80	S 3.20 W	32.00	4447.38	1670.79	1666.80 S	118.59W	4.19
STRAIGHT LINE PROJECTION TO TD								
6013.00	89.80	S 3.20 W	77.00	4447.65	1747.75	1743.68 S	122.89W	0.00

ENSIGN OIL & GAS
SHEARER #1-26H
NESS COUNTY, KANSAS
SEC. 26 - T17S - R25W

HALLIBURTON
ENERGY SERVICES
DRILLING SYSTEMS



SYNOPSIS

The Ensign Operating Co. Shearer "B" 1-26H NE NE NW Sec. 26, T17S, R25W, Ness County, Kansas is a 6013 foot horizontal well drilled to test and produce potential bypassed reserves from the Mississippian Warsaw Dolomite in the Aldrich NE Field.

The well was drilled conventionally to a depth of 4046 ft at which point directional tools were run and the hole was kicked off with an angle building rate of 15 degrees per 100 ft. The curve portion of the hole was drilled to a measured depth of 4622 ft and a true vertical depth of 4427 ft. 7" casing was set at 4608 ft in the Warsaw Dolomite. Slim hole assembly was run and a 6 1/4" hole was drilled horizontally to a measured depth of 6013 ft, resulting in 1405 ft of open hole in the Warsaw Dolomite.

After evaluating samples and hole conditions, it was concluded that the well could be tested through the open hole, and a perforated liner was not run prior to swabbing and pump testing the well.

GENERAL WELL INFORMATION

Operator:	Ensign Operating Co.
Well Name:	Shearer "B" 1-26H API No. 15-135-24,024
Field Name:	Aldrich N. E.
Location:	NE NE NW Sec. 26, T17S, R25W Surface Loc. 2310' FWL 100' FNL Bottom Hole Loc. 2187' FWL 1844' FNL
County:	Ness
State:	Kansas
Elevation:	G.L. 2507' K.B. 2515'
Spudded	August 16, 1997
Completed Drilling:	September 5, 1997
Total Measured Depth:	Driller 6013'
True Vertical Depth:	(Projected To Bit) 4447'
Vertical Section:	(Projected To Bit) 1748'
Status:	Production casing set at 4608' to produce Misssissippian Warsaw Oil from open hole (4608' - 6013')
Drill-Stem Tests:	None
Logging Program:	Halliburton Measurement While Drilling Gamma Ray and Rate Of Penetration: 4000' - 4622' Measured Depth 4000' - 4426' True Vertical Depth

Sample Program: Ten foot samples from 4046' to 4700'.
Approximately 32 foot samples from 4700' to 6013'
Samples caught on depth by rig crews.

Mud Program: Baroid Drilling Fluids, Ken Dohm, Mud Engineer
0' - 3500' fresh water mud, 3500' - 4622' fresh water chem gel,
4622' - 6013' 2%KCl water

Lost Circulation: None reported

Contractor: Duke Drilling Company Inc. Rig No. 1,
Mike Godfrey, Tool Pusher

Bit Record:

No.	Size	Make	Type	Depth Out	Feet	Hours
1	12 1/4	HTC	(Retip)	871	862	13
2	12 1/4	HTC	(Retip)	1625	754	9 1/4
3	8 3/4	STC	F2HP	4046	2421	74 1/2
4	8 3/4	STC	F2HP	4622	576	49 1/4
5	6 1/4	STC	F4P	4935	313	12 1/2
6	6 1/4	STC	F4P	6013	1078	36 1/4

DAILY DRILLING REPORT

Ensign Operating Co.
Shearer "B" 1-26H
NE NE NW Sec. 26, T17S, R17W
Surface Loc. 2310' FWL 100' FNL
Bottom Hole Loc. 2187' FWL 1844' FNL
Ness County, Kansas

7:00 A.M. Reports

1	Aug 1/97	Completed drill site construction		
2	Aug 17/97	0	(0')	Rig up rotary tools spud @ 8:30 p.m. 8/16/97
3	Mon 18	1258	(1258')	
4	Tue 19	1625	(367')	Set 9 5/8" @ 1624', Plug down @9:00p.m 8/18/97
5	Wed 20	2110	(485')	Drill plug 8:30 a.m. 8/19/97
6	Thur 21	2865	(755')	
7	Fri 22	3375	(510')	
8	Sat 23	3705	(330')	displace hole to mud up @ 3500'
9	Sun 24	4046	(342')	TOH to PU angle bld ass'y
10	Mon 25	4070	(24')	PU angle bld ass'y, TIH begin bldg 15deg/100'
11	Tue 26	4228	(158')	TOH to chg out MWD
12	Wed 27	4420	(192')	Fin TIH w/ angle bld ass'y & 3rd MWD
13	Thur 28	4610	(190')	
14	Fri 29	4622	(12')	Set 7" @ 4608'
15	Sat 30	4622	(0')	Finish running and cementing 7" TIH W/ slim hole ass'y to drill plug, cement & horizontal ext.
16	Sun 31	4656	(34')	Drilled plug @ 4:00 a.m. 8/31/97
17	Sep 1/97	4960	(338')	TOH to change out motor & bit. TIH to drill ahead
18	Tue 2	5430	(470')	
19	Wed 3	5533	(103')	Began short trip. BHA stuck @ 4857'.
20	Thur 4	5795	(262')	Pumped 10,000 SCF air, worked BHA loose, completed short trip to 4608'. drlg ahead.
21	Fri 5	6013	(218')	RTD 6013(TMD) @ 3:15 p.m. 9/4/97

FORMATION TOPS

Ensign Operating Co.
Shearer "B" 1-26H
NE NE NW Sec. 26, T27S, R25W
Surface Loc. 2310' FWL 100' FNL
Bottom Hole Loc. 2187' FWL 1844' FNL
Ness County, Kansas

G.L. 2507' K.B. 2515'

	Comparison Well SE SE SW 23-17S-25W K.B. 2505'	D.T.,Smples MWD Gamma Ray True Vertical Depth	Measured Depth
Pennsylvanian			
Lansing	3819' (-1314')	3830' (-1314')	3830'
B.KC/Pleasanton	4114' (-1609')	4128' (-1612')	4129'
Marmaton	4152' (-1647')	4174' (-1658')	4177'
Pawnee	4240' (-1735')	4256' (-1740')	4268'
Labette Sh.	4309' (-1804')	4323' (-1813')	4354'
Ft. Scott	4319' (-1814')	4329' (-1813')	4363'
Cherokee	4343' (-1838')	4353' (-1837')	4399'
Conglomerate	4388' (-1883')	4398' (-1882')	4491'
Mississippian			
Warsaw	4418' (-1913')	4420' (-1904')	4570'
Total Depth	4439' (-1934')	4447' (-1931')	6013'

LITHOLOGIC SAMPLE DESCRIPTION

Ensign Operating Co.
Shearer "B" 1-26H
NE NE NW Sec. 26, T17S, R25W
Surface Loc. 2310' FWL 100' FNL
Bottom Hole Loc. 2187' FWL 1844' FNL
Ness County, Kansas

Samples were examined from 4046 feet through 6013 feet. Samples were collected at 10 foot intervals through the curve building section of the hole and approximately every 32 feet, or one sample for every stand of drill pipe drilled, through the horizontal leg of the hole.

Lansing/Kansas City

4046 - 4060 Predominantly Limestone, off white - tan, oolicastic, porosity excellent, permeability poor. Some limestone tan, micritic, dense. Slight shale, dark gray - black, soft, fissile, and shale, gray, silty, firm.

4060 - 4070 No sample.

4070 - 4090 Limestone, tan, micritic, dense, with limestone, mottled off white - lightbrown, pelletoid, fine grained. Slight shale, black a/a, Some oolicastic limestone, cavings from above.

4090 - 4100 Limestone, tan, micritic, mottled white/brown, pelletoid, and limestone, gray, silty, dense. Occasional fragment coarse grained, and occasional fragment with fair solution porosity.

4100 - 4110 Limestone a/a, with shale, black, soft, fissile increasing.

4110 - 4130 Limestone, 50% tan and gray, micritic, 50% pelletoid, some mottled dirty brown with black mafic inclusions. Shale, black, decreasing.

Base Kansas City/Pleasanton MD 4129 TVD 4128 (-1612)

4130 - 4140 Limestone, a/a. Shale black, gray, soft increasing.

4140 - 4150 Limestone, brown & gray, very silty & sandy. Shale a/a.

4150 - 4160 Limestone, tan, pelletoid, fine - medium grained. Occasional Limestone a/a. Scattered Shale, black & gray

4160 - 4180 Shale, black, gray, green, red, firm to very soft.
Much of red shale washes out. Limestone a/a decreasing.

Marmaton MD 4177 TVD 4174 (-1658)

4180 - 4190 Limestone, off white - tan, micritic.

4190 - 4230 Limestone, off white, micritic, Shale, gray, soft.
Much varicolored shale caving from above.

4230 - 4240 Limestone, white - light brown, micritic, dense, with Sandstone, off white - gray, very fine grained, very calcareous (silty granular residue in acid), soft, fair - good porosity, no show.
Some Shale, gray - black, silty, soft - firm.

4240 - 4250 Limestone, micritic, a/a.
Sandstone a/a grading to sandy silty limestone. Shale decreasing.

4250 - 4260 Limestone, tan - gray, micritic - silty, dense.

4260 - 4270 Limestone a/a, with scattered Shale gray - black.

Pawnee MD 4268 TVD 4256 (-1740)

4270 - 4180 Limestone, tan - gray, micritic, silty dense, Chert common.

4280 - 4300 Limestone a/a, less silty,

4300 - 4310 Limestone a/a, becoming more silty. Scattered Chert.

4310 - 4320 Limestone, tan - gray, micritic, silty, dense. Abundant Shale, dark gray - black, soft - firm, calcareous. Some shale speckled white.

4320 - 4330 A/A Shale increasing.

4330 - 4340 Shale, dark gray - black, firm - soft, calcareous.
Scattered Limestone, tan, large blocky fragments.

4340 - 4350 Shale and limestone a/a with Siltstone, brown, calcareous.

Labette Shale MD 4354 TVD 4323 (-1807)

4350 - 4360 Shale dark gray - black, calcareous.

Fort Scott MD 4363 TVD 4329 (-1813)

4360 - 4370 Limestone, tan - light brown, micritic, dense. Some Limestone, granular, with poor - fair porosity, some dead oil stain, some f ragments fluoresce and give good milky cut fair show. Shale a/a.

4370 -4380 Limestone a/a with scattered chert. Less fluorescence and cut. Some shale a/a

4380 - 4400 Limestone, tan - light brown a/a and limestone off white, micritic, dense. Shale decreasing.

Cherokee MD 4399 TVD 4353 (-1837)

4400 - 4410 Limestone a/a, and Limestone tan, granular, fine grained, blocky. Shale black and gray, gray fraction grades to siltstone.

4410 - 4420 Limestone predominantly white - off white, micritic. Occasional Limestone pelletoid, hard, dense, with no show. Scattered shale a/a.

4420 - 4430 Limestone a/a.

4430 - 4440 Limestone a/a with Shale black, gray, green and few fragments reddish brown.

4440 - 4460 Shale a/a increasing with Limestone a/a and Limestone tan, granular, coarse grained, blocky.

4460 - 4470 Limestone tan micritic, Limestone tan, coarse, granular. Shale a/a and shale mottled green/gray. Shale red increasing. One fragment sandstone light brown, medium grained, well sorted, good porosity, no show.

4470 - 4490 Limestone and shale a/a with Chert amber, common.

Conglomerate MD 4491 TVD 4398 (-1892)

4490 - 4500 Limestone a/a. Varicolored Shales, and Chert increasing.

4500 - 4510 Limestone and Shale a/a with scattered Sandstone yellow/brown and gray/green, silt to very fine grained, dirty, and Chert mottled red/white, and clear - amber.

4510 - 4530 A/A with increasing Sandstone, brown, conglomeratic, silt to fine grained and Sandstone gray, silty, with black shaley inclusions, silt to fine grained

4530 - 4550 Sandstone a/a with Siltstone red, sandy, and increasing varicolored shales. Limestone above decreasing.

4550 - 4560 A/A with Sandstone gray, glassy quartz, clean, poorly sorted, fine to coarse grained. Some sandstone well sorted, fine grained, well rounded, soft friable, excellent porosity.

4560 - 4570 Shales a/a, Shale red and yellow increasing. Chert increasing.

Mississippian Warsaw MD 4570 TVD 4420 (-1904)

4570 - 4580 Shale, Sand, Chert a/a
Scattered Dolomite stained light brown, pelletoid, coarse grained, poor intergranular porosity, slow milky cut.
Scattered Dolomite stained light brown, coarse crystalline, good intercrystalline and vuggy porosity, bright yellow green fluorescence, instant streaming cut.

4580 - 4600 A/A Dolomite increasing, stained light to dark brown, coarse crystalline and pelletoid, good intercrystalline and vuggy porosity, some free oil in open vugs, bright green fluorescence, instant cut.

4600 - 4622 Dolomite continuing to increase. Conglomerate shales and sands from above still dominate sample. Dolomite variable stain, even light to dark brown ,to mottled. Fair to good intergranular and vuggy orosity. fluorescence and cut a/a. Also dolomite white, pelletoid, with fair to good intergranular porosity and some vuggy porosity. Discontinuous black oil stain that occurs within the pore space. The individual pellets are not stained, resulting in a mottled black/white pattern.
Instant milky cut.

7" casing set at 4608

4622 - 4630 Cement and Dolomite a/a, poor sample.

4630 - 4660 No cuttings over shale shaker. No Sample.

4660 - 4670 Poor Sample. Cuttings ground to fine unconsollidated grains. Dolomite grains white and tan. No cut from individual grains. Small pile of grains in dimple dish give strong milky cut.

4670 - 4680 A/A Over all becoming more tan, stain evident.

4680 - 4690 Sample improving. Dolomite a/a fine grained.
Some cement in sample.

4690 - 4700 Dolomite even brown stain, fine to coarse grained, good porosity.
Dolomite calcareous, off white, dense, poor porosity, no stain.

4700 - 4736 Dolomite and Calcareous Dolomite a/a.

4736 - 4767 Dolomite even light brown stain, pelletoid, coarse grained,
Decreasing Calcareous Dolomite a/a. Occasional Chert fragments.

4767 - 4799 Dolomite granular a/a, stain light to dark brown and mottled,
good intergranular and vuggy porosity. Dolomite off white, dense
micritic, no stain. Stained and unstained 50/50.

4799 - 4831 A/A even light brown stain, stained / unstained 50/50.

4831 - 4864 Dolomite even stain, tan to brown, some fragments mottled,
pelletoid, medium grained, good to excellent intergranular and vuggy
porosity. Instant milky cut. Occasional Chert.

4864 - 4896 A/A with good vuggy porosity and poor intergranular porosity.

4896 - 4928 Dolomite a/a and much Dolomite off white, micritic, dense, unstained.
Occasional porous fragments are unstained.
Clear crystalline quartz common.

4928 - 4960 Trip sample, poor. Sample finely ground, Dolomite a/a.

4960 - 4992 Poor sample a/a. Much of sample is unconsolidated grains or pellets.
Pellets unstained / stained 60/40 Some Dolomite stained light
brown, fine crystalline, good intercrystalline porosity.
Crystalline Quartz common.

Basal Penn. Conglomerate MD 4992

4992 - 5029 Sample improving with larger fragments. Dolomite a/a
Few fragments Shale gray and green.

5029 - 5055 A/A with Shale burgundy and Chert rust and gray.

Mississippian Warsaw MD 5061

5055 - 5080	Very poor sample. Dolomite a/a. Scattered Shale varicolored. Limestone white, soft and hard. Chert amber. (Conglomerate caving from above.)
5080 - 5184	Small fragments and clusters. Dolomite, light stain, very fine crystalline, sucrosic. Dolomite, gray - white, micritic dense, no stain. Stained / unstained 50/50 Small pile in dimple dish gives instant milky cut. Small show of oil on shale-shaker after connection.
5184 - 5215	Dolomite, even light brown stain, fine to medium grained, good intergranular porosity and excellent vuggy porosity. Coarse unconsolidated pellets oil stained. Some dense grains unstained. Some free oil droplets floating on wet sample.
5215 - 5246	A/A with some Chert and some clear crystalline Dolomite.
5246 - 5278	Dolomite a/a increasing in unconsolidated pelletoid and decreasing in very fine grained sucrosic. stained / unstained 55/45.
5278 - 5310	Dolomite not as evenly stained but droplets of free oil on fragments common. Some drops of oil floating on wet sample. Some clear crystalline quartz.
5310 - 5406	Dolomite a/a. Some fragments larger with light brown to brown stain. Stained / unstained 50/50. Cement and shale caving from above.
5406 - 5470	Clean sample, small fragments. Dolomite a/a stain light to dark brown. Clear crystalline quartz common.
5470 - 5502	Dolomite and quartz a/a. Cement and shale cave from above.
5502 - 5539	Dolomite a/a with much iron (chunks not shavings). Cement and shale common. (caving from above)
5539 - 5597	After trip no sample.
5597 - 5666	Dolomite small fragments pelletoid, stained / unstained 50/50 Abundant clear crystalline quartz, much cement and green shale. Very little sample on shale shaker, poor representation.
5666 - 5693	Very small fragments, Dolomite, light brown stain, and Dolomite, white. Very fine crystalline, sucrosic. Stain 50/50.

5693 - 5722 Fragments very fine. Dolomite a/a.
Small pile of sample in dimple dish gives instant milky cut.

5722 - 5757 A/A with some larger fragments. Drops of free oil on some fragments.
Occasional shale, dark gray.

5757 - 5789 Very fine fragments Dolomite a/a. Droplets of free oil through out.

5789 - 5853 Dolomite light brown stain, crystalline, very fine to silt sized, possible good intercrystalline porosity. Sample is very fine. unconsolidated, appears to be pelletoid, possibly good intergranular porosity.
Stain/unstained 50/50

5853 - 5884 Dolomite fragment size increasing. Solution porosity is evident in larger fragments. Intergranular porosity is poor. Crystalline fraction is very fine with good intercrystalline porosity.
Stained fragments fluoresce bright light green and give instant streaming cut. Stained/unstained 45/55. Chert common.

5884 - 5918 Dolomite a/a fragment size decreasing.
Clear crystalline Quartz common. Occasional Shale black.
Decreasing Chert.

5918 - 5949 Dolomite, predominantly unconsollidated pellets, with very fine crystalline sucrosic pellets. Stained/unstained 30/70.
Much free clear crystalline quartz.

5949 - 5978 Dolomite a/a very light to light brown stain, stained/unstained 30/70.
Much free Quartz a/a.

5978 - 6013 Dolomite, predominantly individual pellets. Some pellets are very fine crystalline, sucrosic. Some fragments stained very light to light brown. Stained/unstained 25/75. Solution porosity is not evident on small fragments. Much free quartz a/a.

Total Measured Depth Driller: 6013'
True Vertical Depth: 4447' (-1931')

15-135-24024-0100

SUMMARY

The Ensign Operating Co. Shearer "B" 1-26H NE NE NW Sec. 26, T17S, R25W, Ness County, Kansas is a 6013 foot horizontal well drilled to test and produce potential bypassed reserves from the Mississippian Warsaw Dolomite in the Aldrich NE Field.

The well was drilled conventionally to a depth of 4046 ft at which point directional tools were run and the hole was kicked off with an angle building rate of 15 degrees per 100 ft. The curve portion of the hole was drilled to a measured depth of 4622 ft and a true vertical depth of 4427 ft. 7" casing was set at 4608 ft in the Warsaw Dolomite. Slim hole assembly was run and a 6 1/4" hole was drilled horizontally to a measured depth of 6013 ft, resulting in 1405 ft of open hole in the Warsaw Dolomite.

Lithologic samples in the horizontal portion of the hole tended to be ground very fine and were found poor for reservoir evaluation.

After evaluating samples and hole conditions, it was concluded that the well could be tested through open hole, and a perforated liner was not run prior to swabbing and pump testing the well.

Low productivity indicated by swab testing is thought probably due to mud damage. Oil cuts during swab testing were only 13% and it was determined that the well should be pump tested prior to any acid treatment