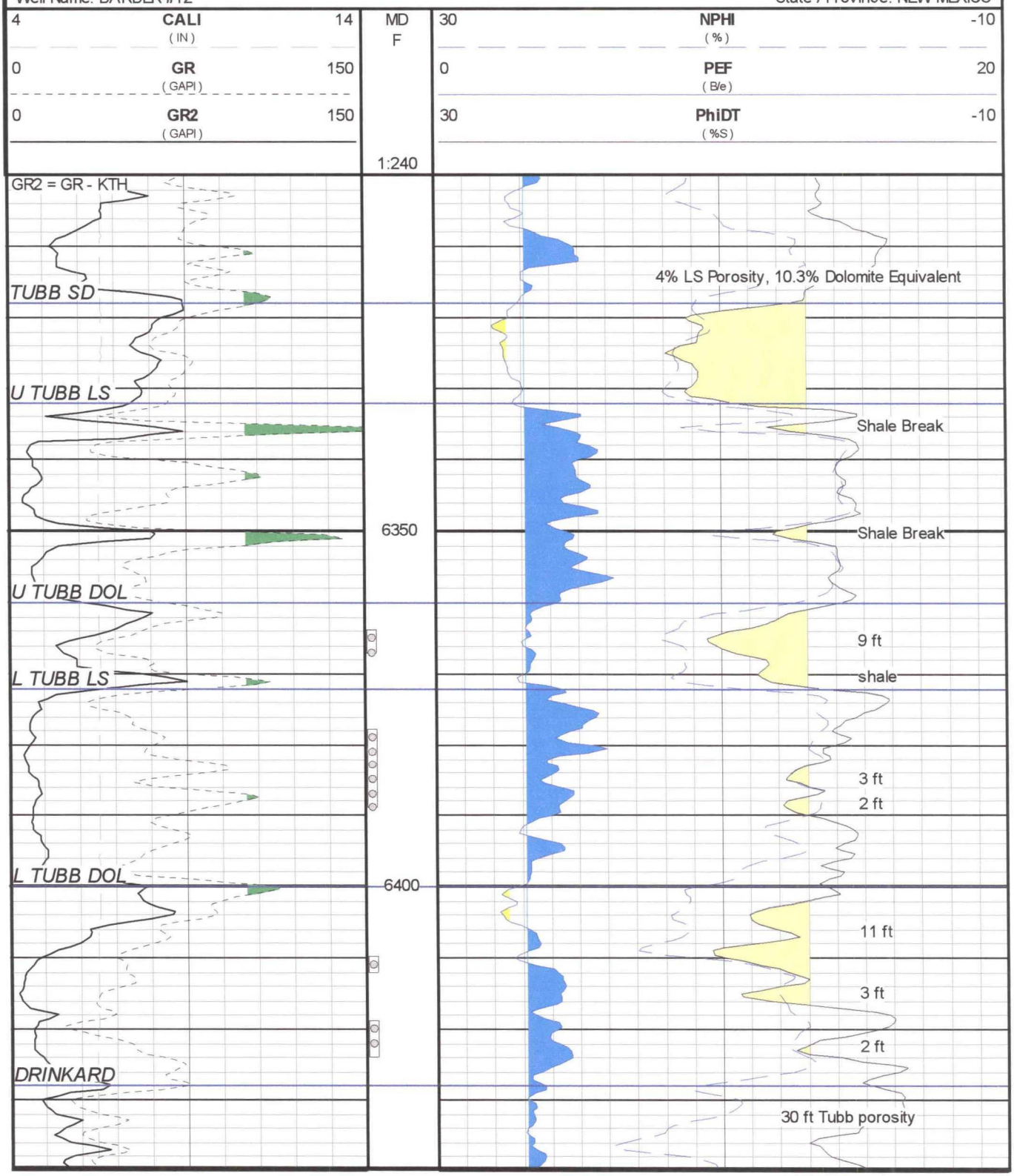
Computer Processed Log
(File Name: barber #12)

Operator: Sapient Energy
Well Name: BARBER #12

County / Parish: LEA
State / Province: NEW MEXICO

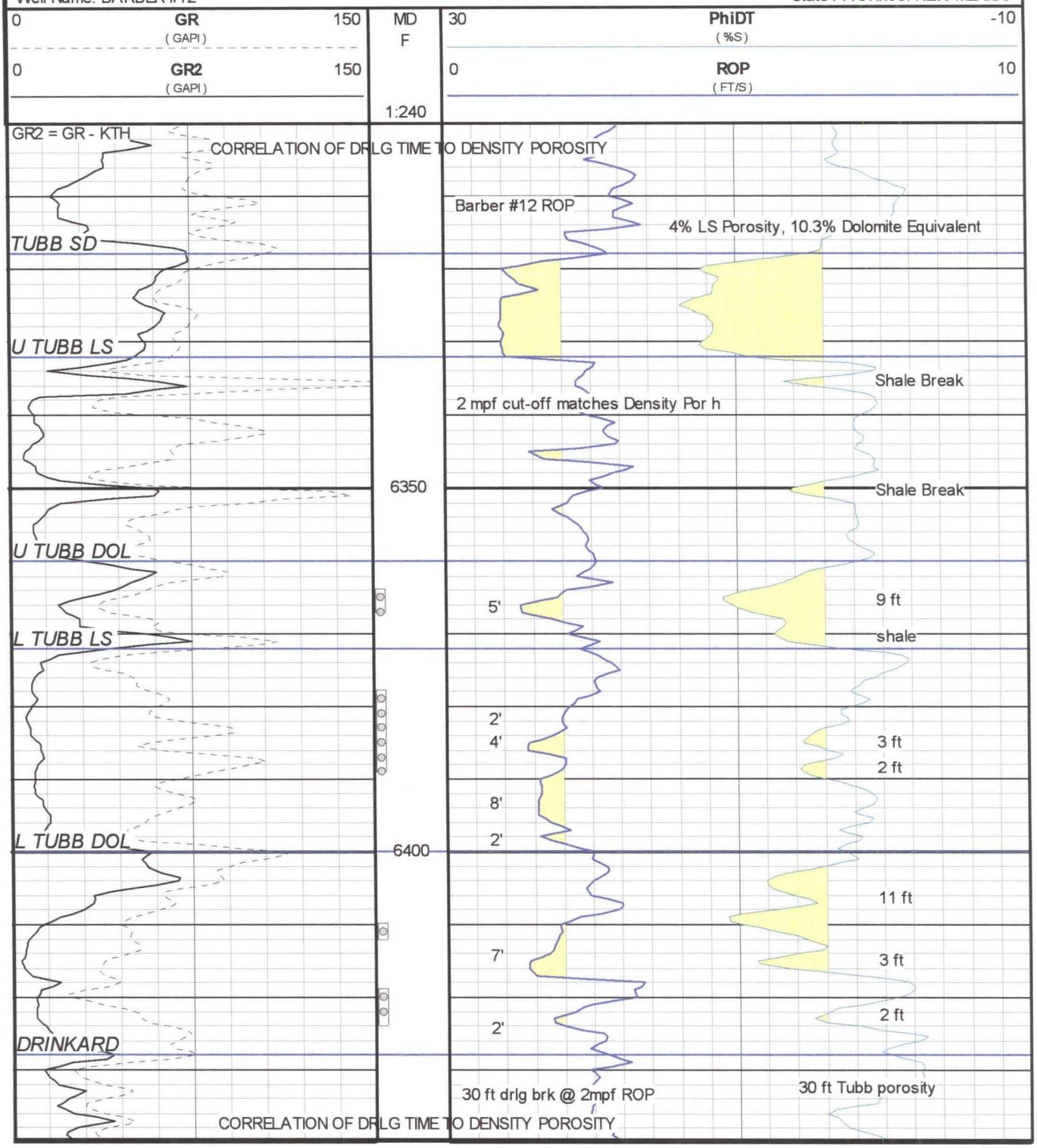


BEFORE THE
OIL CONSERVATION COMMISSION
Case No.12605 Denovo Exhibit No. 31-A
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

Computer Processed Log
(File Name: barber #12)

Operator: Sapient Energy
Well Name: BARBER #12

County / Parish: LEA
State / Province: NEW MEXICO

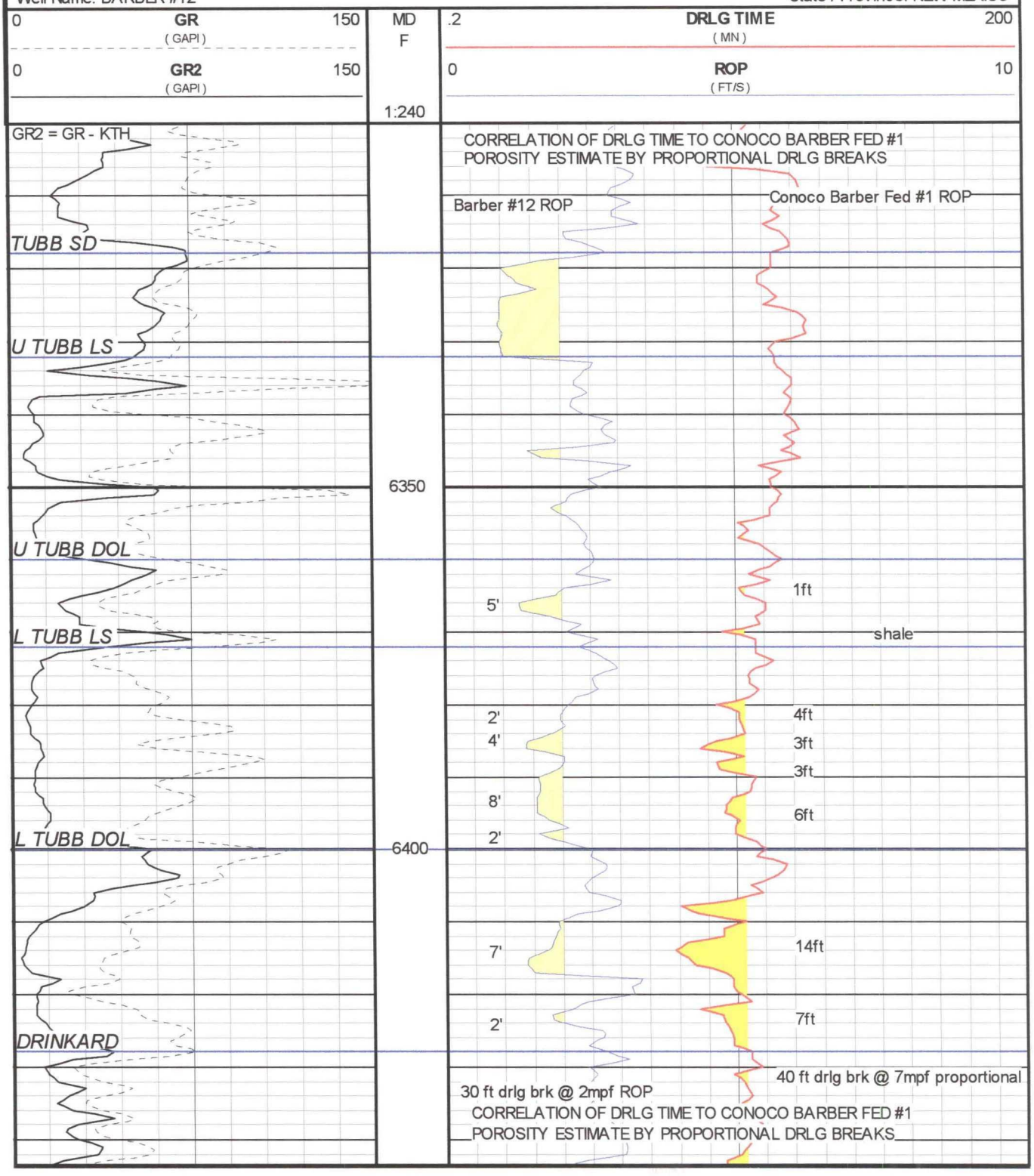


BEFORE THE
OIL CONSERVATION COMMISSION
Case No.12605 Denovo Exhibit No. 31-B
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

Computer Processed Log
(File Name: barber #12)

Operator: Sapient Energy
Well Name: BARBER #12

County / Parish: LEA
State / Province: NEW MEXICO



BEFORE THE
OIL CONSERVATION COMMISSION
Case No.12605 Denovo Exhibit No. 31-C
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

Exhibit 31: Supporting Data

(a) Barber #12 Density Log: Digital presentation of Density log with cut-offs and net porosity shaded and tabulated. The presentation shows the PE curve establishing the sand, dolomite, limestone lithology. The curve is shaded to the right of 3.14 (dolomite) value to indicate limestone. Perforated intervals are shown. I have also presented the spectral Gamma Ray curve shown as GR-KTH. This curve removes the Uranium effects that make the rocks look artificially shaley.

(b) Barber #12 ROP and Density Log: This presentation shows the drilling time log ROP correlated to the Density porosity log. The purpose is to demonstrate that a cut-off of 2 minutes per foot drilling time yields the same net porosity value as the density log. The proportional drilling break so defined will be applied to the Conoco Barber Federal #1 drilling time log.

(c) Conoco Barber-Fed #1 Net Porosity Estimate: The drilling time curve of the Conoco well is presented correlated to the gamma ray and drilling time log for the Sapient Barber #12. By applying theSapient Barber #12 proportional drilling time cut-off (developed in exhibit 29b above), I estimate net porosity of 40 feet for the Conoco well.

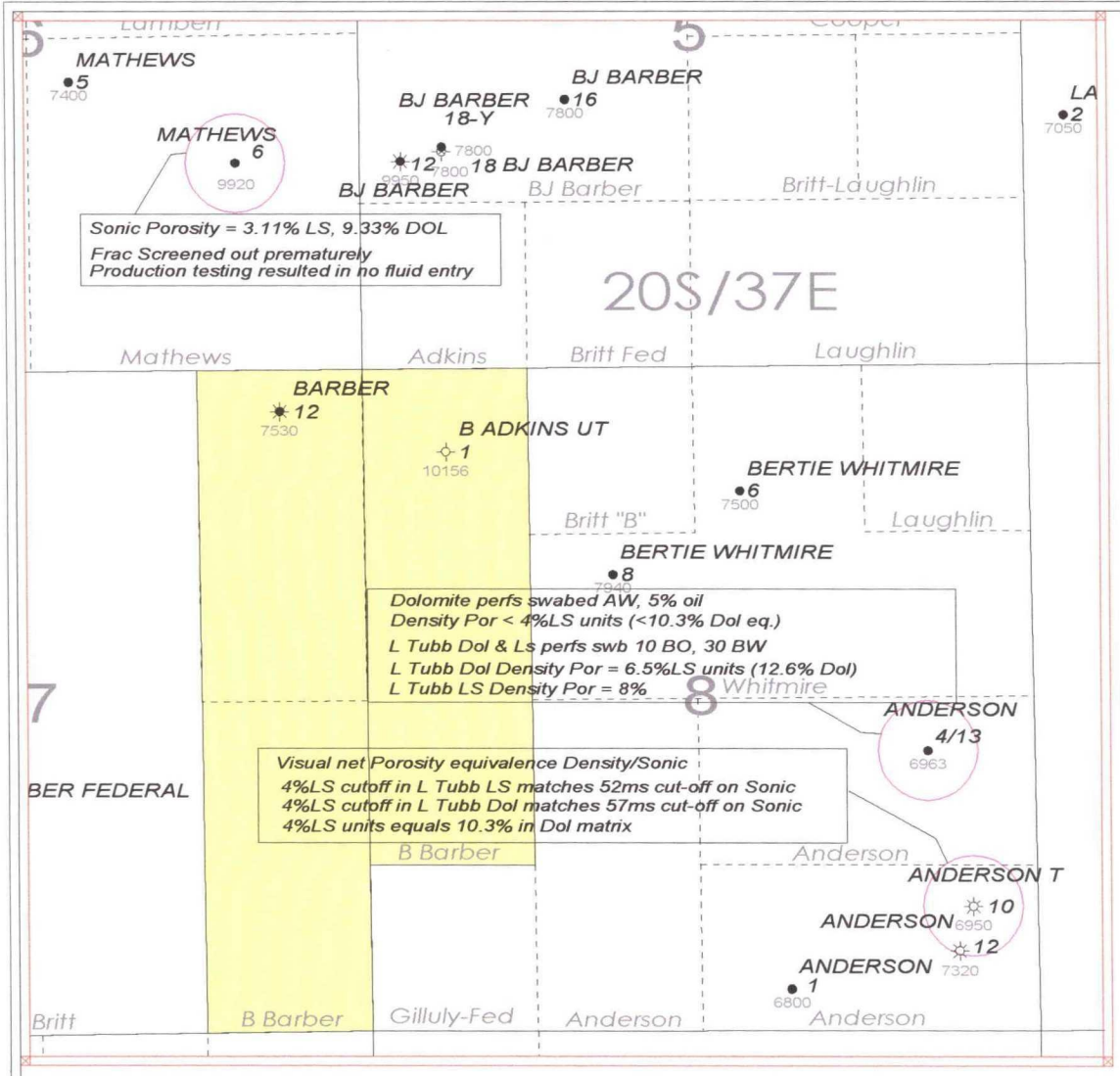
(d) Barber #12 Mudlog: Copy of the mudlog across the Tubb interval. Shows the mixed lithology and the source of the ROP curve. The lithology is laterally variable and beds become more or less dolomitic and more or less limey. I also used two core descriptions and other mudlogs from the Monument Tubb Pool to establish my interpretation of Tubb lithology.

(e) Conoco Barber-Federal #1 Mudlog: A copy of the mudlog we were able to get from Conoco's March 2001 Cross-section exhibit. These data were digitized to use in exhibit 9 above. This is included to show the source document.

(f) Barber #12 Log Analysis: The complete log analysis based on the digital data set is presented. The analysis is restricted to the net porosity delineated in exhibit 29a. The proportional response of the PE curve is used to calculate a matrix density for each interval based on a two-mineral model shown by the shading in columns. The resulting density porosity is entered into a normal carbonate Archie Equation solution of water saturation (Sw) using the formation water resistivity supplied to us by the Midland office of Baker-Hughes (vendor of our logs).

The spreadsheet shows the resulting total of Phi-h (calculated per 0.5 ft and summed), and average values of Porosity and Water Saturation Sw. Porosity, Sw, and Phi-h are utilized in Sapient's engineering calculations.

(g) DST Data for Initial BHP Estimate: Sapient did an exhaustive search of all its well records for any measured initial pressure. Apparently Cross Timbers put this well down the pipeline without any sort of initial measured SIBHP or even an initial SITP. Therefore we have estimated one from these data. The exhibit is a collection of 6 pages. Page one is a tabulation of the wells and the data used to estimate an average intitial BHP of 2597 psi that Sapient used in its calculation. Page two is a plat showing the spatial distribution of the data. It is correlative and proximal. The last four pages are copies of the source-scout tickets reporting the DST's and pressures.



BEFORE THE
OIL CONSERVATION COMMISSION
Case No.12605 Denovo Exhibit No. 30
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

LEGEND

○ Log forTubb Porosity Cut-off

Sapient Energy Corp.

Monument Area, Lea Co., NM
Development of Porosity Cut-off
Tubb Dolomite & Limestone

RW Von Rhee		10/30/01
porctoff.gpf	Scale 1:18000.	1":3000'

OfficePro v2.0.0, Cover Sheet

Suttles Logging, Inc.

P.O. BOX 10725, Midland, TX, 79702
(915) 687-3148, FAX:(915) 687-3157

Hydrocarbon Mud Logging
Geological Consulting

BEFORE THE OIL CONSERVATION COMMISSION
Case No. 12605 Denovo Exhibit No. 31-P
Submitted By: Sapient Energy Corp.
Hearing Date: November 6, 2001

Faxed/Printed Interval: 6300 to 6440

Total Feet Faxed/Printed: 140

Well Total Depths: 5100 to 7530

Well Total Footage: 2430

Average Rate Of Penetration For Faxed/Printed Interval: 4.51

Longest Rate Of Penetration For Faxed/Printed Interval: 3.59 at depth 6306

Average HotWire Reading For Faxed/Printed Interval: 32

Largest HotWire Reading For Faxed/Printed Interval: 95 at depth 6330

First Footage With Porosity For Faxed/Printed Interval: 6322

First Footage With Flouresence For Faxed/Printed Interval: 6322

First Footage With Cut For Faxed/Printed Interval: 6322

OfficePro, Printed: 10-30-2001 3771-98-201 Log Scale: 5"

SUTTLES LOGGING, INC.

HYDROCARBON WELL LOGGING
GEOLOGICAL CONSULTING

P.O. BOX 10725, Midland, TX 79702 (915)687-3148

CO - Circulate Out	LC - Last Circulation
CON - Connection Made	NB - New Bit
DC - Depth Correction	NR - No Returns
DDC - Drills Depth Correc.	PG - Plugged Back
DS - Directional Survey	TD - Net_Wireal Depth
DST - Drill Stem Test	WOB - Weight On Bit

Producer: CROSS TIMBERS OIL CO.

Wellname: B.J.BARBER #12

Location: 330' FNL & 660' FEL,SEC.7

Survey: T20S,R37E, P S&L SURVEY

County, St: LEA, NM

Geologists: S.J.MARTINEZ AND D.W.POWELL

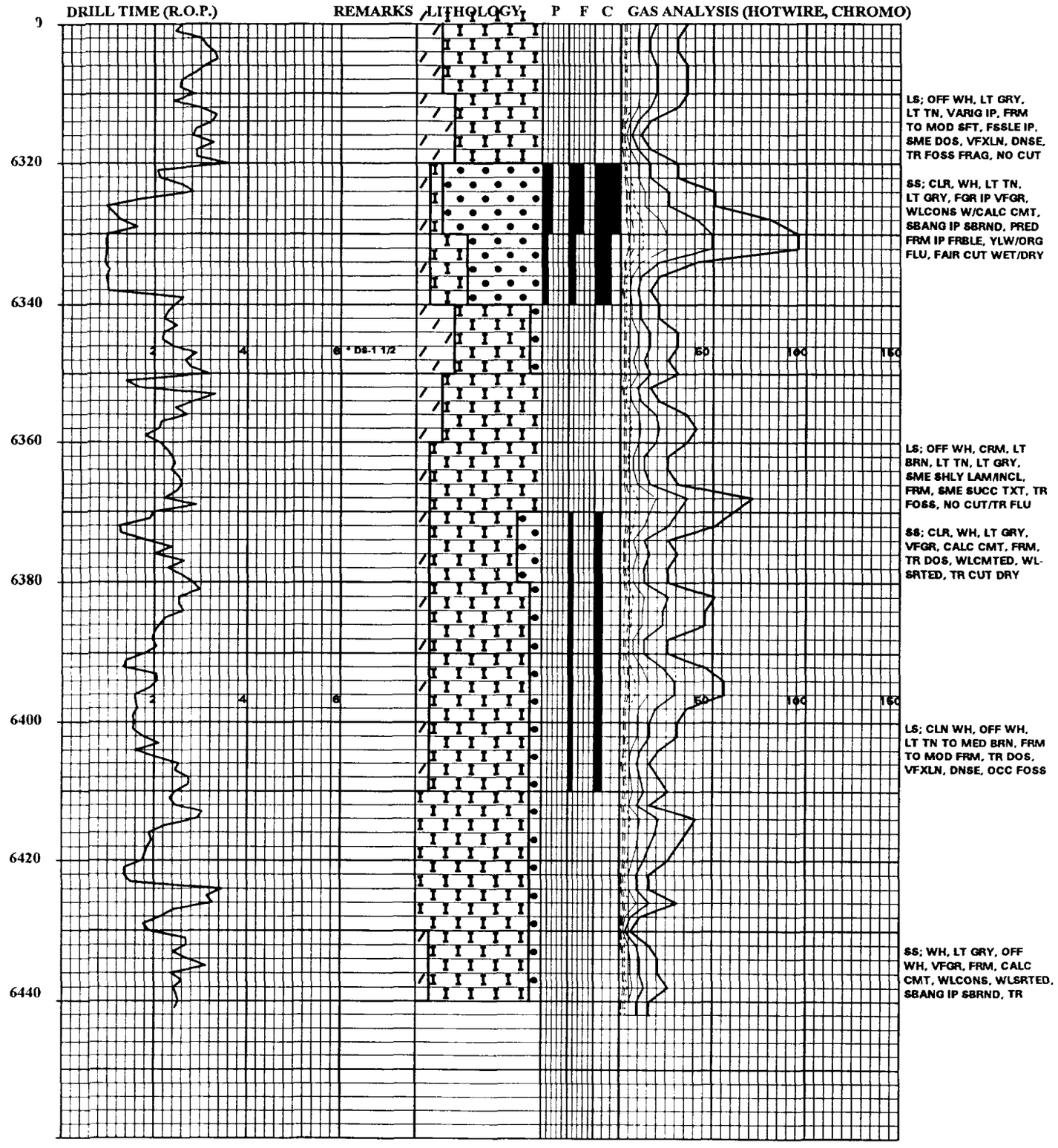
Elevation: (GL)- 3557 (KB)- 3569

Depths: (START)- 6300 (TD)- 6440, Dates: 12/3/98 TO 12/10/1998

NO SAMPLE- LIMESTONE-
DOLOMITE- ANYHYDRITE-
SAND- SILT-
SHALE- CHERT-

Total Gas -
C1 Gas -
C2 Gas -
C3 Gas -
C4 Gas -
C5 Gas -

DEPTH DRILL TIME (R.O.P.) COMMENTS LITHOLOGYPORFLR CUT GAS ANALYSIS (HOTWIRE DESCRIPT & REMARKS


DRILL TIME (R.O.P.)
REMARKS / LITHOLOGY
P F C
GAS ANALYSIS (HOTWIRE, CHROMO)
0
6320
6340
6360
6380
6400
6420
6440
2
4
6 * DS-1 1/2
50
100
150
LS; OFF WH, LT GRY, LT TN, VARIG IP, FRM TO MOD SFT, FSSLE IP, SME DOS, VFXLN, DNSE, TR FOSS FRAG, NO CUT
SS; CLR, WH, LT TN, LT GRY, FGR IP VFGR, WLCONS W/CALC CMT, SBANG IP SBRND, PRED FRM IP FRBLE, YLW/ORG FLU, FAIR CUT WET/DRY
LS; OFF WH, CRM, LT BRN, LT TN, LT GRY, SME SHLY LAM/INCL, FRM, SME SUCC TXT, TR FOSS, NO CUT/TR FLU
SS; CLR, WH, LT GRY, VFGR, CALC CMT, FRM, TR DOS, WLCMTED, WL-SRTED, TR CUT DRY
LS; CLN WH, OFF WH, LT TN TO MED BRN, FRM TO MOD FRM, TR DOS, VFXLN, DNSE, OCC FOSS
SS; WH, LT GRY, OFF WH, VFGR, FRM, CALC CMT, WLCONS, WLSRTED, SBANG IP SBRND, TR

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12605 Denovo Exhibit No. 31-Z
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

CONOCO NO. 1 BARBER FED.
7-20S-37E KB 3556 TD 7330 ABO – TWISTED OFF DRILL PIPE.
PBTD 5705 BLINEBRY
PADDOCK PRODUCER (4-97 TO 7-00)

Advance Consultants Corp.

Well Consultants * Geological Services
Complete Hydrocarbon Well Logging
P.O. Box 5274, Midland Tx. 79704

(915) 683-6276
(915) 684-3141
Fax:
(915) 683-9862

Interval Logged: 4000 to 7338 ft.
5 Inch Log

Company: CONOCO INC.
Well: BARBER FEDERAL NO. 1
Location: SEC 7 T-20-S R-37-E
Survey: 1773 FSL - 2017 FWL
County and State: LEA CO. NEW MEXICO
Geologists: J. CASIMIR and J. BOWIE
Elevation: G.L. 3545 RKB 3555
Dates Logged: 1/ 2/1997 to 1/27/1997

API #: 30-025-33736

Pa ≈ 6705
TD 7330-Twist off
PBTD 5705 tbl
Total Plug Back
DOA 5-13-97
Spud 12-27-96

ABBREVIATIONS

NR: No Returns	DC: Depth Correction
CG: Conn Gas	NB: New BR
CO: Circ Out	NCB: New Core BR
TG: Trip Gas	DCB: Diamond Core BR
DST: Drill Stem Test	DS: Directional Survey

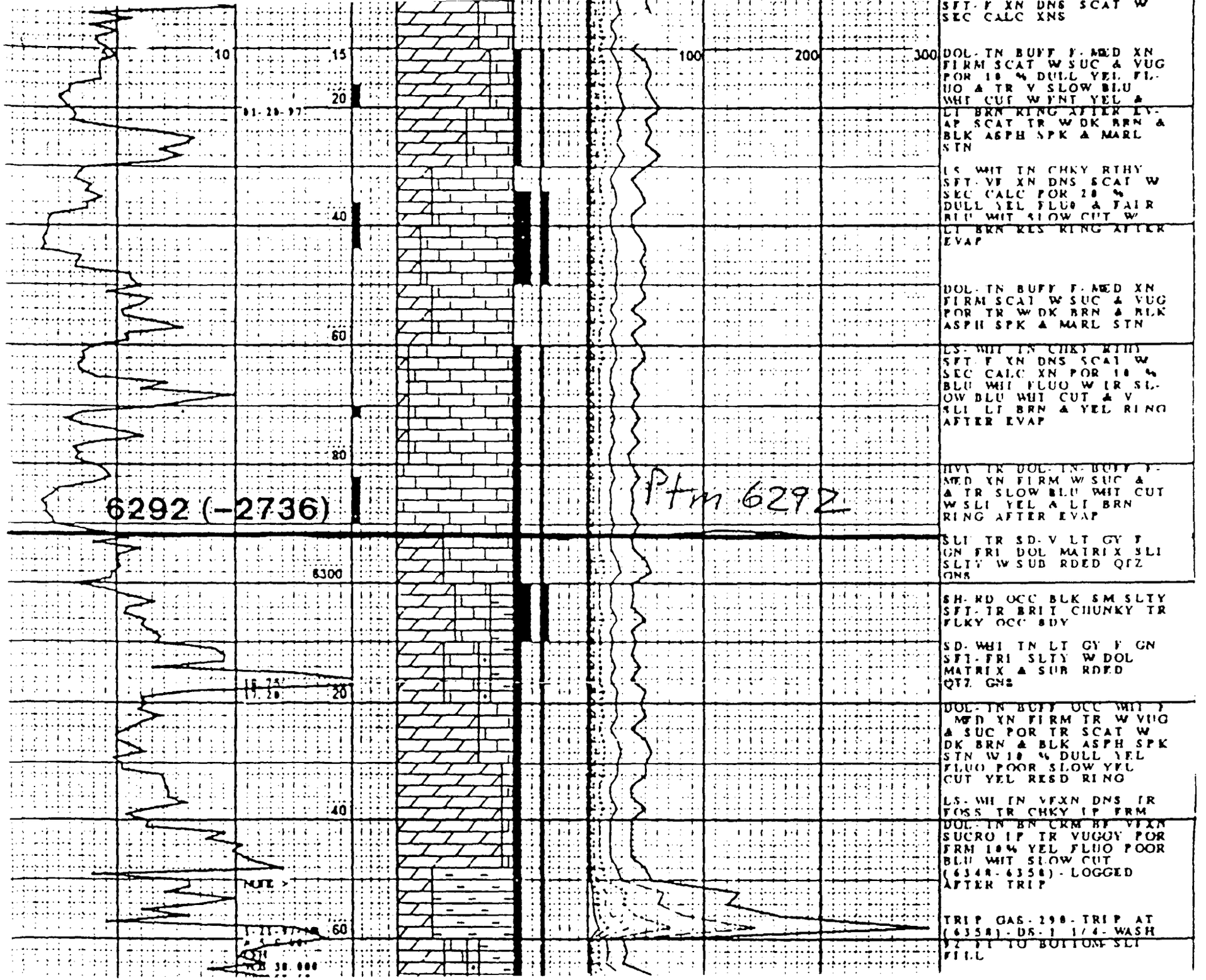
LITHOLOGY SYMBOLS

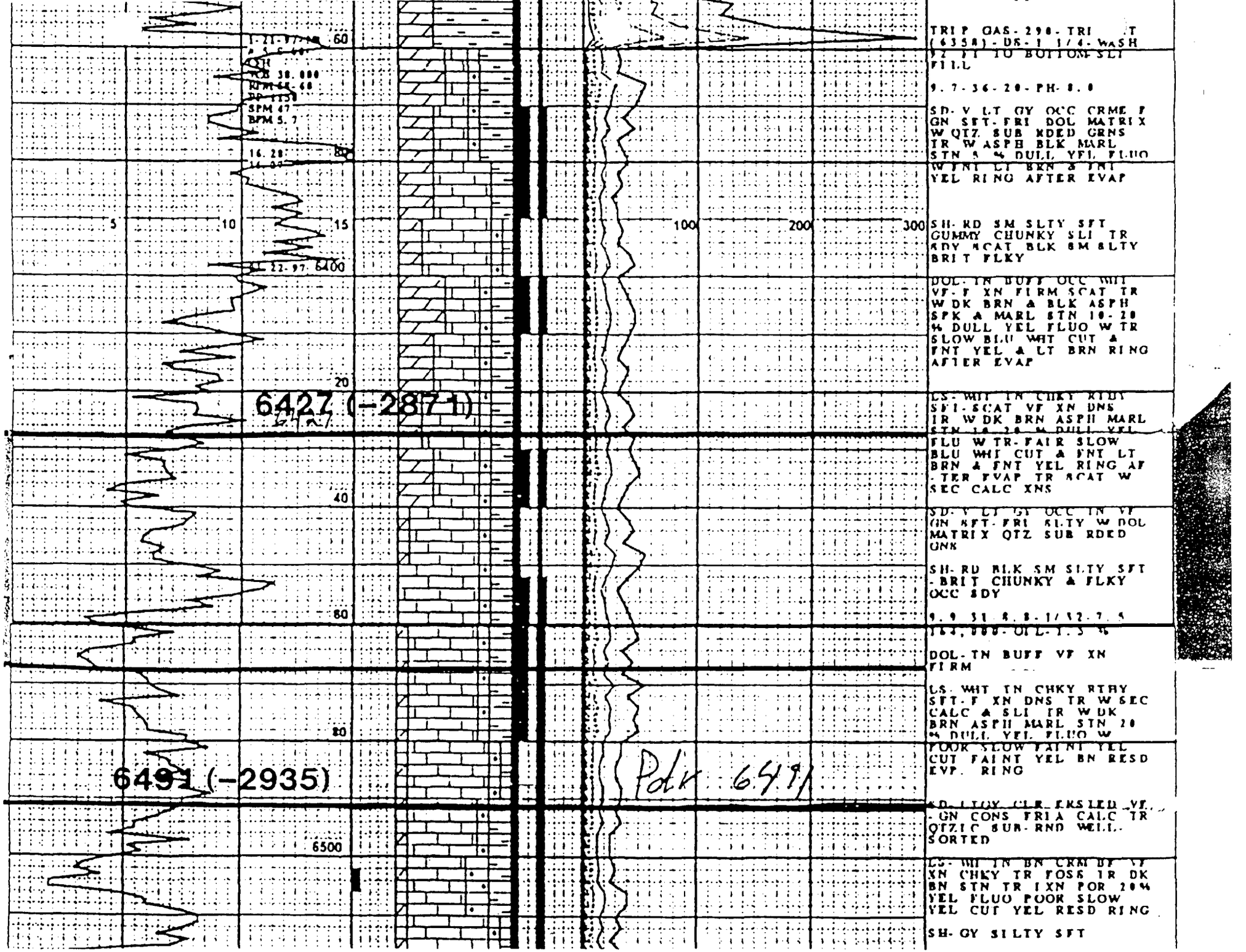
Sand:		Chert:	
Lime:		Cong:	
Dolo:		Shale:	
Anhy:		Salt:	

GAS CHROMATOGRAPH

Total Gas:	C3:
C1:	C4:
C2:	C5:

DRILLING RATE	PORO	LITHOLOGY	CUT	FLUR	ANALYSIS LOG	REMARKS
min/ft	0-25%		dfg	0-100	Total Gas and Chromatograph	W - VIS - WL - C - PH - CHL


10
15
20
01-28-97
40
60
80
6292 (-2736)
6300
20
40
60
100
200
300
Ptm 6292
SFT F XN DNS SCAT W SEC CALC XNS
DOL TN BUFF F MED XN FIRM SCAT W SUC & VUG POR 10 % DULL YEL FLUO & TR V SLOW BLU WHT CUT W FNT YEL &
LT BRN RING AFTER EVAP SCAT TR W DK BRN & BLK ASPH SPK & MARL STN
LS WHT TN CHKY RTHY SFT VF XN DNS SCAT W SEC CALC POR 20 % DULL YEL FLUO & FAIR BLU WHT SLOW CUT W
LT BRN RES RING AFTER EVAP
DOL TN BUFF F MED XN FIRM SCAT W SUC & VUG POR TR W DK BRN & BLK ASPH SPK & MARL STN
LS WHT TN CHKY RTHY SFT F XN DNS SCAT W SEC CALC XN POR 10 % BLU WHT FLUO W TR SLOW BLU WHT CUT & V SLI LT BRN & YEL RING AFTER EVAP
HVY TR DOL TN BUFF F MED XN FIRM W SUC & & TR SLOW BLU WHT CUT W SLI YEL & LT BRN RING AFTER EVAP
SLI TR SD V LT GY F GN FRI DOL MATRIX SLI SLTY W SUB RDED QTZ GNS
SH RD OCC BLK SM SLTY SFT TR BRIT CHUNKY TR FLKY OCC SDY
SD WHI TN LT GY F GN SFT FRI SLTY W DOL MATRIX & SUB RDED QTZ GNS
DOL TN BUFF OCC WHT F MED XN FIRM TR W VUG & SUC POR TR SCAT W DK BRN & BLK ASPH SPK STN W 10 % DULL YEL FLUO POOR SLOW YEL CUT YEL RESD RING
LS WH TN VFXN DNS TR FOSS TR CHKY IP FRM
DOL TN BN CRM BF VFXN SUCRO IP TR VUGGY POR FRM 10% YEL FLUO POOR BLU WHT SLOW CUT (6348-6358) - LOGGED AFTER TRIP
TRIP GAS 298 - TRIP AT (6358) - DS 1 1/4 - WASH 92 FT TO BOTTOM SLI FILL
NOTE >
1-11-97


60
SPM 47
BPM 5.7
16.28
80
5
10
15
100
200
300
22.97 6400
20
6427 (-2871)
40
80
80
6491 (-2935)
Pdk 6491
6500
TRIP GAS-290-TRI T
(6358)-DS-1 1/4-WASH
TO BOTTOM SLI
FILL
9.7-36-20-PH-8.0
SD-V LT GY OCC CRME F
GN SFT-FRI DOL MATRIX
W QTZ SUB RDED GRNS
TR W ASPH BLK MARL
STN 5 % DULL YEL FLUO
W FNT LT BRN & FNT
YEL RING AFTER EVAP
SH-RD SM SLTY SFT
GUMMY CHUNKY SLI TR
SDY SCAT BLK SM SLTY
BRIT FLKY
DOL-TN BUFF OCC WHT
VF-F XN FIRM SCAT TR
W DK BRN & BLK ASPH
SPK & MARL STN 10-20
% DULL YEL FLUO W TR
SLOW BLU WHT CUT &
FNT YEL & LT BRN RING
AFTER EVAP
LS-WHT TN CHKY RTHY
SFT-SCAT VF XN DNS
TR W DK BRN ASPH MARL
STN 10-20 % DULL YEL
FLU W TR-FAIR SLOW
BLU WHT CUT & FNT LT
BRN & FNT YEL RING AF
-TER EVAP TR SCAT W
SEC CALC XNS
SD-V LT GY OCC TN VF
GN SFT-FRI SLTY W DOL
MATRIX QTZ SUB RDED
GNS
SH-RD BLK SM SLTY SFT
-BRIT CHUNKY & FLKY
OCC SDY
9.9 31 8.8-1/32-7.5
164,000-OIL-1.5 %
DOL-TN BUFF VF XN
FIRM
LS-WHT TN CHKY RTHY
SFT-F XN DNS TR W SEC
CALC & SLI TR W DK
BRN ASPH MARL STN 20
% DULL YEL FLUO W
POOR SLOW FAINT YEL
CUT FAINT YEL BN RESD
EVP. RING
-GN CONS FRIA CALC TR
QTZIC SUB-RND WELL-
SORTED
LS-WHT TN BN CRM BF VF
XN CHKY TR FOSS TR DK
BN STN TR IXN POR 20%
YEL FLUO POOR SLOW
YEL CUT YEL RESD RING
SH-GY SILTY SFT

Barber #12 Log Anaysis
Sec 7-T20S-R37E
Lea County, NM

					MODEL			CALC GRAIN DENSITY		Rw	0.045				
Depth	GR API	LLD	RHOB	PE	SD/DOL	LS/DOL	DOL/LS	RHOMA SD/DOL LOG PE	CALCULATED LS/DOL RHOMA	NET POR INTVL USED IN 3/01 SHADED	Sw CALC RHOMA POR	PHI-h w CALC RHOMA	DEL h	TOTAL ZONE h	BVW
6361.5	90	34.2	2.62	3.28					2.86	12.8%	28.3%	0.064	0.5		0.036
6362	87	29.4	2.61	3.34					2.85	13.2%	29.5%	0.066	0.5		0.039
6362.5	76	26.4	2.60	3.33					2.85	13.7%	30.2%	0.068	0.5		0.041
6363	65	25.1	2.59	3.16					2.87	14.7%	28.7%	0.074	0.5		0.042
6363.5	59	24.9	2.57	3.14					2.87	15.8%	26.9%	0.079	0.5		0.043
6364	56	25.3	2.55	3.25					2.86	16.7%	25.2%	0.084	0.5		0.042
6364.5	52	26.2	2.53	3.32					2.86	17.5%	23.7%	0.087	0.5		0.041
6365	45	27.4	2.52	3.14					2.87	18.7%	21.7%	0.093	0.5		0.041
6365.5	40	28.3	2.52	3.14					2.87	18.5%	21.6%	0.093	0.5		0.040
6366	36	28.7	2.53	3.14					2.87	18.0%	22.0%	0.090	0.5		0.040
6366.5	37	28.1	2.54	3.33					2.85	17.0%	23.6%	0.085	0.5		0.040
6367	41	26.9	2.56	3.46					2.84	15.5%	26.3%	0.078	0.5		0.041
6367.5	51	25.8	2.58	3.46					2.84	14.5%	28.8%	0.073	0.5		0.042
6368	58	24.7	2.59	3.36					2.85	14.0%	30.6%	0.070	0.5		0.043
6368.5	61	23.8	2.60	3.28					2.86	14.1%	30.8%	0.071	0.5		0.044
6369	59	24.7	2.59	3.30					2.86	14.2%	30.0%	0.071	0.5		0.043
6369.5	61	26.7	2.59	3.22					2.86	14.9%	27.6%	0.074	0.5		0.041
6370	72	30.3	2.58	3.14					2.87	15.4%	25.0%	0.077	0.5	9	0.039
6370.5	95	35.4	2.59	2.81			SH					**1.397**			
6383	91	431.3	2.64	4.20					2.78	8.0%	12.8%	0.040	0.5		0.010
6383.5	93	424.0	2.63	4.28					2.78	8.3%	12.4%	0.042	0.5		0.010
6384	85	411.9	2.62	4.13					2.79	9.3%	11.2%	0.047	0.5		0.010
6384.5	66	400.2	2.62	3.81					2.81	10.8%	9.8%	0.054	0.5		0.011
6385	57	393.2	2.62	3.57					2.83	11.9%	9.0%	0.060	0.5		0.011
6385.5	53	375.8	2.63	3.77					2.82	10.3%	10.6%	0.051	0.5	3	0.011
6386	63	362.5	2.65	4.38					2.77			**0.293**			
6388.5	91	260.6	2.61	4.28					2.78	9.2%	14.2%	0.046	0.5		0.013
6389	83	243.9	2.62	4.30					2.77	8.9%	15.2%	0.045	0.5		0.014
6389.5	75	229.4	2.63	4.31					2.77	8.4%	16.7%	0.042	0.5		0.014

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12605 Denovo Exhibit No. 31-F
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001

Barber #12 Log Anaysis
Sec 7-T20S-R37E
Lea County, NM

					MODEL			CALC GRAIN DENSITY		Rw	0.045				
Depth	GR API	LLD	RHOB	PE	SD/DOL	LS/DOL	DOL/LS	SD/DOL LOG PE RHOMA	CALCULATED LS/DOL RHOMA	NET POR INTVL USED IN 3/01 SHADED	Sw CALC RHOMA POR	PHI-h w CALC RHOMA	DEL h	TOTAL ZONE h	BVW
6390	69	217.4	2.64	4.04					2.80	8.7%	16.6%	0.043	0.5	**2**	0.014
6390.5	62	210.4	2.66	3.55					2.84			**0.176**			
6402	90	14.1	2.64	2.77				2.81		9.4%	60.4%	0.047	0.5		0.057
6402.5	85	13.5	2.62	2.74				2.80		10.2%	56.7%	0.051	0.5		0.058
6403	84	13.2	2.60	2.43				2.75		8.9%	65.6%	0.044	0.5		0.058
6403.5	87	13.2	2.58	2.21				2.72		8.1%	72.2%	0.040	0.5		0.058
6404	88	13.7	2.57	2.27				2.73		9.0%	63.5%	0.045	0.5		0.057
6404.5	80	14.0	2.57	2.37				2.74		9.8%	58.2%	0.049	0.5		0.057
6405	71	15.2	2.58	2.58				2.78		11.2%	48.4%	0.056	0.5		0.054
6405.5	64	16.6	2.59	2.91				2.83		13.5%	38.6%	0.067	0.5		0.052
6406	62	18.2	2.61	3.25					2.86	13.8%	36.1%	0.069	0.5		0.050
6406.5	65	20.2	2.62	3.45					2.84	12.2%	38.8%	0.061	0.5		0.047
6407	67	23.8	2.63	3.47					2.84	11.4%	38.0%	0.057	0.5		0.044
6407.5	66	28.0	2.61	3.53					2.84	12.4%	32.4%	0.062	0.5		0.040
6408	61	33.0	2.59	3.61					2.83	13.5%	27.4%	0.067	0.5		0.037
6408.5	55	38.9	2.54	3.54					2.84	16.0%	21.3%	0.080	0.5		0.034
6409	50	45.8	2.53	3.25					2.86	18.0%	17.4%	0.090	0.5		0.031
6409.5	46	56.7	2.53	3.14					2.87	18.3%	15.4%	0.091	0.5		0.028
6410	45	72.1	2.54	3.14					2.87	17.5%	14.2%	0.088	0.5		0.025
6410.5	48	91.8	2.56	3.14					2.87	16.4%	13.5%	0.082	0.5		0.022
6411	49	118.5	2.59	3.49					2.84	13.9%	14.0%	0.070	0.5		0.019
6411.5	49	143.7	2.61	4.06					2.79	10.5%	16.8%	0.053	0.5		0.018
6412	49	160.9	2.62	4.24					2.78	9.0%	18.6%	0.045	0.5		0.017
6412.5	51	176.7	2.63	4.35					2.77	7.8%	20.5%	0.039	0.5	**11**	0.016
6413	53	183.0	2.64	4.37					2.77			**1.354**			
6414	48	186.0	2.61	4.48					2.76	8.5%	18.2%	0.043	0.5		0.016
6414.5	41	183.2	2.58	4.37					2.77	10.6%	14.7%	0.053	0.5		0.016
6415	38	180.2	2.56	4.29					2.78	12.2%	13.0%	0.061	0.5		0.016
6415.5	37	170.4	2.56	4.32					2.77	11.9%	13.7%	0.059	0.5		0.016

Barber #12 Log Anaysis
Sec 7-T20S-R37E
Lea County, NM

					MODEL			CALC GRAIN DENSITY		Rw	0.045				
Depth	GR API	LLD	RHOB	PE	SD/DOL	LS/DOL	DOL/LS	SD/DOL LOG PE RHOMA	CALCULATED LS/DOL RHOMA	NET POR INTVL USED IN 3/01 SHADED	Sw CALC RHOMA POR	PHI-h w CALC RHOMA	DEL h	TOTAL ZONE h	BVW
6416	37	159.1	2.60	4.34					2.77	9.7%	17.4%	0.048	0.5		0.017
6416.5	36	149.7	2.64	4.11					2.79	8.6%	20.2%	0.043	0.5	3	0.017
6417	38	143.0	2.68	3.56					2.84			**0.308**			
6422	51	138.2	2.64	4.30					2.77	7.3%	24.6%	0.037	0.5		0.018
6422.5	53	143.6	2.64	4.54					2.75	6.8%	26.1%	0.034	0.5		0.018
6423	53	145.3	2.63	4.63					2.75	6.9%	25.6%	0.034	0.5		0.018
6423.5	56	143.0	2.64	4.70					2.74	5.7%	31.1%	0.029	0.5	2	0.018
6424	64	126.8	2.68	4.67					2.74			**0.133**			
						AVERAGE or TOTAL VALUES				**12.2%**	**26.7%**	**3.660**		**30**	**0.032**

Sapient Energy Corp

Monument Area
Lea Co., NM
TUBB Formation DST Data

Operator	Well Name	DATE	DST Interval	SEC	TWP	RGE	IFP-FFP	BHSIP	TIME	TYPE	DESCRIPTION
AMERADA	STATE 'F' #5	11/04/48	6480-6559	36	19S	36E	720-90	2570	15"	SIP	Op 240", GTS 35", Flow for 225"; R/270' SLI OGCM, 1110' Sul Wtr;
SINCLAIR	LEA '373' UT #1	03/16/66	6500-6600	34	19S	37E	164-239	2548	120"	FSIP	Op 120", GTS 7", TSTM; R/90' FO, Gty 39.2, 450' HOGCM, 120' DM
ASHMUN & HILLIARD	COOPER #1	12/13/63	6542-6606	3	20S	37E	192-255	2664	30"	FSIP	Op 60", GTS 3", FARO 140mcfd, R/362' HOGCM
SKELLY OIL	VAN ETTEN #12	06/07/66	6375-6600	9	20S	37E	165-200	2621	30"	ISIP	Op 120", GTS 8"; R/370' GCM.
CONOCO	BRITT B #24	06/20/65	6488-6520	11	20S	37E	337-1840	2483	30"	ISIP	Op 270", R/ 7 BO
CONOCO	BRITT B-15 #9	03/11/57	6447-6544	15	20S	37E	1325-1365	2695	15"	SIP	Op 105", GTS 2.5", OTS 15", Flw 13 BO/60", no wtr, Gas ARO 2158 mcfd
								2597	AVG SIBHP		

RL – pressure of fluid may cause higher readings

Considers this a minimum (very low shut in times)

another BHP – a bit above

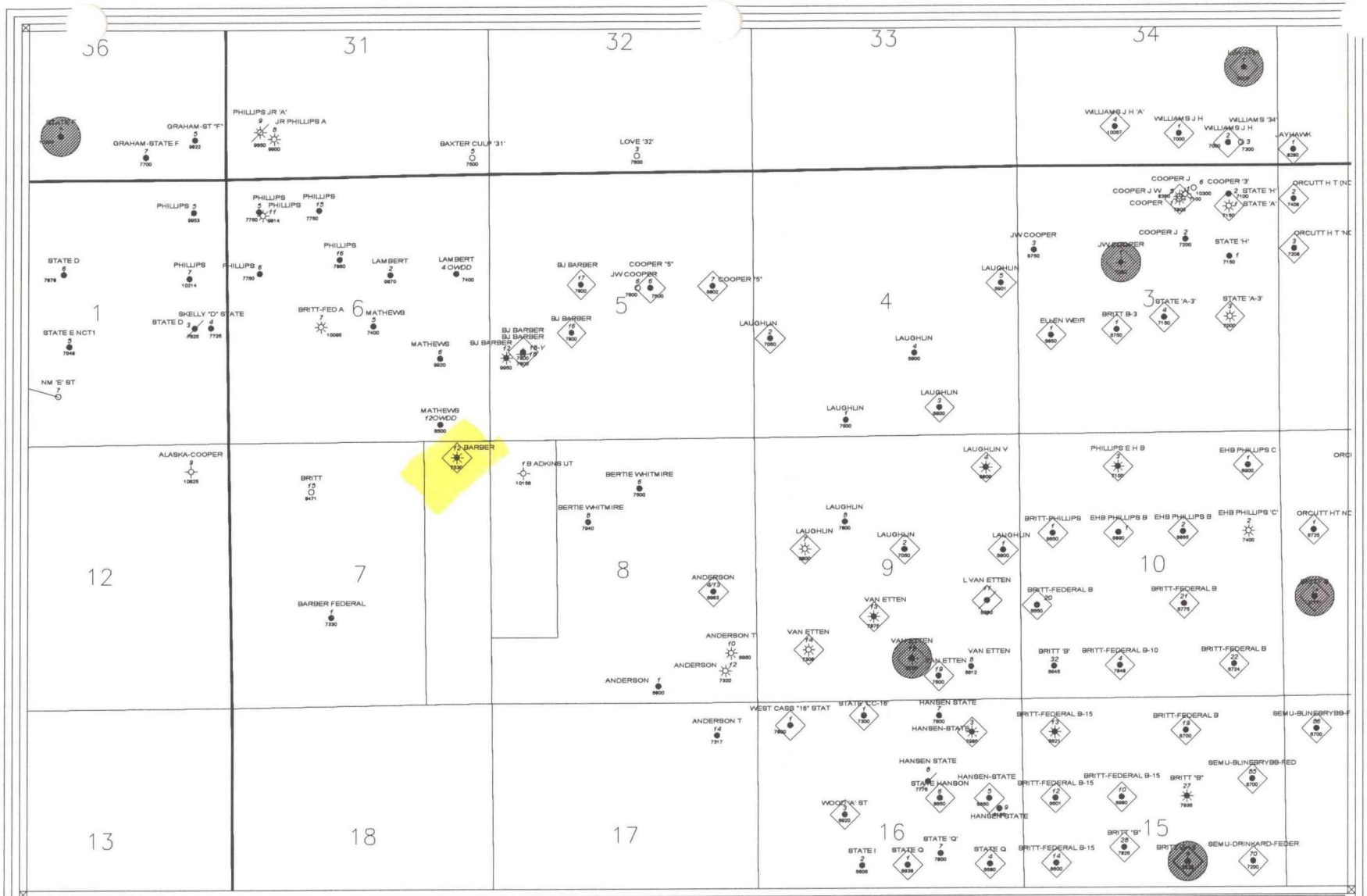
2390

this would lower Baber psi by 75 lbs (3%)

2546 lbs. by using midpoint rather than average

Lifters from witness

BEFORE THE
OIL CONSERVATION COMMISSION
Case No. 12605 Denovo Exhibit No. 31-G
Submitted By:
Sapient Energy Corp.
Hearing Date: November 6, 2001



LEGEND

- ◇ IP FM = TUBB
- ● Tubb DST for BHP Estimate

Sapient Energy Corp.

Monument (Tubb) Field Area
Location of TUBB DST's

RW Von Rhee		10/30/01
dst_map.gpf	Scale 1:36000.	1":3000'

Sapient Energy Corp.

Monument Field Area
Lea County, NM

TUBB FORMATION DST'S

Co. LEA Pool MONUMENT PADDOCK State N.M. KROENLEIN 1540

Company Amerada - #5-F - State Elev. 3590

Loc. 785' FSL & 1980' FWL
Sec. 36, T-19-S, R-36-E

Acid or Shot	Casing Record	Tops
Perf.20/9915-20 Perf.68/9890-9907 250 gals.	13-3/8 - 187 - 200 8-5/8 - 2400 - 1300 5-1/2 - 9978 - 1200	A. 980 B. 1070 B.S. 2250 Yates 2430 San.And. 5135 Tubb 6295 Wich. 6905 (Tops Con't)

Bpd. 5-2-48 Comp. 11-4-48

I. P. F. 197 BOPD;1/4" ch; 2" @ 9905

Gr. 47 GOR 3020 TP 2000 CP Flr. 9835

Remarks Con't. Page #2

TP 9890
TD 10,255
PBD 9930

Other TOPS record; W.C. 7904; Perm.-Sil. 8386; Fuss. 8827; Mont. 9257; Simp. 9562; Ellen. 10090; Granite 10157.

PAGE 2 OMITTED

K-1540

LEA, NEW MEXICO 36-19-36 Page #3
Amerada - #5-F - State

Core 5716-28, rec. 12' dol. pin point trce. good por. frac in lower part SI to good st & scat bldg.
DST 5716-28, op. 4 hrs. SBA rec. 80 M. strong sul odor FBHP 35-40, 15" SI 85#
Core 5726-36, rec. 10' dol. scat frac. & bldg. O in upper part good stn in lower part
Core 5736-46, rec. 10' dol. scat frac sl por. scat bldg. O.
DST 145' M. last 20' sl O w/sul. W FBHP 0

TUBB — DST 6480-6559, op. 4 hrs. gas/35", LB for 3' 45", rec. 270 sl GCM, 1110' sul. w. FBHP 720-90, 15" SI 2570

DST 6809-55, op. 4 hrs. SBA, rec. 277 M. Strong sul odor in btm. FBHP 0-150, 15" SI 380
DST 6969-7109, op. 4 hrs. gas/3", 99# 217 MCFPD rec. 32' GCM FBHP 200-300 19" SI 1270
DST 7170-7206, op. 4 hrs. BA 1' 10" C/1' 10" to small to 99#

Con't. Page #4 — REMAINDER PAGES OMITTED.

ILLEGIBLE

TUBB FORMATION DST'S

LEA COUNTY NEW MEXICO WILDCAT

Well: SINCLAIR OIL & GAS CO. #1 Lea "373" Unit Result: NEW OIL DISC
Loc'n: SE/part of cnty; 3 mi SW of 9126' failure, 1 mi SE/Monument; Sec 34-19S-37E, 1980' FSL 660' FEL Sec; surrounded by prodn in Weir & Monument Fields, 3 mi N of Penn producer.

Spud: 12-31-65; Comp: 3-16-66; Elev: 3593' Grd; TD: 8000'; PBTD 6640'
Casing: 13-3/8" 245'/225 sx, 9-5/8" 3883'/1900 sx, 4½" liner 7049'/850 sx
Prod Zone: (Tubb) T/Pay 6505', Prod thru Perfs 6505-6625'
IPP: 25 BOPD plus 4 BLW/24 hrs, Grav 37.5, GOR 125-1
Comp Info: DST 5315-81', op 2 hrs, rec 60' free oil, Grav 43.4, 180' DM & 90' GCM, FP 44-149#, ISIP 1951#/1 hr, FSIP 1800#/2 hrs, DST 6185-6290', op 2 hrs, rec 180' DM & 570' SWCM, FP 104-299#, ISIP 244#/1 hr, FSIP 2287#/2 hrs, DST 6500-6600', op 2 hrs, GTS 7 mins, TSTM, rec 90' free oil, Grav 39.2, 450' HO&GCM & 120' DM, FP 164-239#, ISIP 2502#/1 hr, FSIP 2548#/2 hrs, DST 6600-6700', op 2 hrs, GTS 6 min, TSTM, rec 270' gas & sli OCM, FP 119-119#, ISIP 1108#/1 hr, FSIP 1183#/2 hrs, DST 6915-46', op 2 hrs, rec 450' gas in DP, 190' sli O&GCM, FP 59-75#, ISIP 1490#/1 hr, FSIP 1424#/2 hrs, DST 7885-8000', op 1 hr, rec 90' DM, FP 164-164#, ISIP 299#/1 hr, FSIP 164#/2 hrs, Perf 6680, 6185', set ret @ 6120', sqzd perfs w/600 sx, DO to 6640', Perf 6505, 6520, 6524, 6527, 6549, 6558, 6566, 6577, 6592, 6597, 6607, 6611, 6613, 6621, 6625, A/1400 gals, Frac w/20,000 gals & 20,000# sd.
TUBB
Tops: (EL) Rustler 1360', Yates 2695', Grayb 3765', San And 4094', Glor 5304', Blineb 5885', Tubb 6420', Drink 6790', Abo 7085', Strawn 7950'

Lea Rinehart OIL REPORTS Date: 4-27-66 Card No.: 13 NM kh

LEA COUNTY NEW MEXICO MONUMENT FLD

Well: ASHMUN & HILLIARD #1 J. W. Cooper Result: OIL
Loc'n: 2 mi SE/Monument; Sec 3-20S-37E, 1916' FNL 2077' FWL Sec

Spud: 10-17-63, Comp: 12-13-63, Elev: 3565' DF, TD: 7959'
Casing: 13 3/8" 253/300 sx, 9 5/8" 4000/500 sx, 7" 6820/400 sx
Prod Zone: T/Pay 6595, Prod thru perfs 6595-6613' TUBB
IPF: 160 BOPD + 4 1/2 BWPD thru 18/64" ch, Grav 36.8, TP 700#, CP pkr
Comp Info: DST 5218-48, op 1 hr, no rec, FP 14-43#, SIP 1649#/30 mins, DST 5218-78, op 1 hr, rec 180' mud, FP 40-116#, SIP 1737#/30 mins, DST 5278-5318, op 1 hr, rec 90' gas in DP & 10' oil plus 210' O&GCM, FP 39-119#, SIP 1635#/30 mins, DST 5735-5840, op 1 hr, rec 90' mud, FP 79-93#, SIP 226#/90 mins, DST 6445-6545, op 1 hr, rec 90' mud, FP 79-93#, SIP 226#/90 mins, DST 6445-6545, op 1 hr, GTS 2 mins, est 30,000 CFGPD, rec 240' GCM, FP 148-156#, SIP 1345#/30 mins, DST 6542-6602, op 1 hr, GTS 3 mins, est 140,000 CFGPD, rec 362' HO&GCM, FP 192-255#, SIP 2664#/30 mins, DST 6650-84, op 1 hr, rec 300' gas in DP & 230' sli O&GCM plus 10' SW, FP 133-148#, SIP 1894#/30 mins, DST 6723-94, op 1 hr, rec 60' sli O&GCM, FP 74#, SIP 147#/30 mins, Perf 6733-86, A/1,000 gals, flwd SW, sqzd, Perf 6595-6613, A/500 gals, re-A/2,000 gals, flwd 109 BO/24 hrs, thru 18/64" ch, Perf 5287-92, A/500 gals sqzd, Perf 4200-15, swbd wtr, sqzd. C/Forest Blackstock.
TUBB
Tops: (EL) Yates 2620, Queen 3410, San And. 3905, Glor. 5210, Tubb 6355, Abo 7010, Penn. 7880'.

Lea Rinehart OIL REPORTS Date: 2-5-64 Card No.: 13 NM gr

Monument Field Area
Lea County, NM
TUBB FORMATION DST'S

LEA COUNTY NEW MEXICO MONUMENT (TUBB & BLINEBRY) FLD

Well: SKELLY OIL CO. #12 L. Van Etten DUAL Result: OIL
Loc'n: 810' FSL 2130' FEL of Sec 9-20S-37E

TUBB DST

Spud: 4-30-66; Comp: 6-7-66; Elev: 3554' DF; TD: 6700'; PB: 6662'
Casing: 8-5/8" 1260'/920 sx; 5½" 6700'/549 sx
Prod Zone: (Blinebry), T/Pay 5612', Prod thru Perfs 5612-5731'
IPP: 61 BOPD & 53 BW, Grav 41
Prod Zone: (Tubb), T/Pay 6371', Prod thru perfs 6371-6555'
IPF: 5 BOPD, 20/64" ch, Grav 30.2, TP 325#, GV 596,000 CFPD. GOR 119,200
Comp Info: DST 5734-5875', op 1 hr & 45 mins, rec 465' mud cut slty sulf wtr, & 2759' slty sulf wtr, NS, FP 447-1478#, ISIP 2061#/30 mins, FSIP 2037#/1 hr, DST 6375-6600', op 2 hrs, GTS 8 mins, rec 370' GCM, FP 165-200#, ISIP 2621#/30 mins; Perf 6371, 6374, 6385, 6389, 6402, 6405, 6423, 6426, 6428, 6438, 6442, 6445, 6452, 6502, 6505, 6512, 6527, 6529, 6537, 6542, 6544', 6555', A/1500 gals, F/32 BLO/24 hrs, GV 790,000 CFPD, Perf (Blineb) 5612, 5615, 5618, 5623, 5626, 5634, 5647, 5650, 5656, 5659, 5664, 5669, 5672, 5676, 5680, 5687, 5693, 5698, 5704, 5722, 5728, 5731', A/1500 gals, S/53 BLO, 30 BNO, 42 BFW/14 hrs. C/Moran Drlg. & Prod. Co.

TUBB DST

Tops: (EL) Anhy 1146', Slt 1266', B/Salt 2380', Yates 2534', 7-Rivers 2797', Queen 3292', Penrose 3391', Grayb 3595', San And 3926', Glor 5137', Paddock 5222', Blineb 5673', Tubb 6295', Drink 6608', Tubb 6295'

Lea Rinehart OIL REPORTS

Date: 8-10-66 Card No.: 11 NM kh

LEA COUNTY NEW MEXICO MONUMENT-TUBB FIELD ✓

Well: CONTINENTAL OIL CO. #24-B Britt Result: OIL
Loc'n: Sec 11-20S-37E, 1980' FSL 660' FWL Sec

TUBB

Spud: 5-10-65; Comp: 6-20-65; Elev: 3595' Grd; TD: 7000'
Casing: 7-5/8" 1344'/380 sx, 4-1/2" 7000'/600 sx
Prod Zone: T/Pay 6494, Prod thru Perfs 6494-6692
IPF: 139 BO + 20 BW/18-1/2 hrs thru 18/64" ch, Gas vol. 455,000 CFGPD
GOR 3273
Comp Info: Crd 6483-6520, rec 10' dolo, bldg gas, 8' dolo, fair vuggy poro w/sli show gas, 1' dolo, bldg O&G, 3' sli vuggy poro dolo, 1' vuggy poro dolo, bldg O&G, 14' sd, sli bldg O&G; DST 6488-6520, op 3-1/2 hrs, rec 7 BO, ISIP 2483#/30 mins, FP 337-1840#, FSIP 2421#/30 mins; Crd 6520-72, rec 52', no description; Crd 6624-75' rec 51', no description; Perf 5494, 6496, 6498, 6506, 6570, 6584, 6592, 6596, 6601, 6613, 6686, 6692, A/5000 gals.

TUBB

Tops: (EL) Rustler 1369, Yates 2704, Seven Rivers 2965, Queen 3513, Glor 5263, Tubb 6379, Drinkard 6711'.

TUBB CORE / DST

Lea Rinehart OIL REPORTS
RH-184

Date: 7-20-65 Card No.: 9 NM mko

LEA COUNTY | NEW MEXICO | WILDCAT

Well: CONTINENTAL OIL CO. #9 Britt B-15 **Result:** NEW OIL DISC

Loc'n: 15-20S-37E; 1980' FS&ELs of Sec; E/central part of county in shallow Eumont Fld Area.

Spud: 12-4-56; Comp: 3-11-57; Elev: 3563' DF; TD: 8536'; PB: 7752'
Casing: 13" 319', 9 5/8" 3999', 7" 7768'
Prod Zone: T/Pay 7700'; Prod thru perfs 7700-7724'
IPF: 56 BOPD, Grav 39
Comp Info: DST 5175-97' (Glor) op 1½ hrs, rec 180' mud, FP 0#, SIP 1105#; DST 5600-5700' (Blinebry) op 1 hr, rec 270' O&GCM, FP 135#, SIP 195#; DST 6447-6544' (Tubb) op 105 min, gas 2½ min, oil 15 min, flwd 13 BO/1 hr, no wtr, gas vol 2,158,000 CFGPD, GOR 6917-1, FP 1325-1365#, SIP 2695#/15 min; DST 6600-34' (Tubb) op 1 hr, gas 45 min, steady blow, rec 93' GCM, FP 0#, SIP 0#/15 min; DST 6640-6716', (Drinkard) op 3 hrs, gas 115 min, rec 60' GCM, NS, FP 0#, SIP 1445#; DST 6400-47' (Tubb) op 1½ hrs, gas 3 min, rate 517,000 CFGPD, rec 540' HG&DCM w/some free dist on btm, FP 370-190#, SIP 2390#; DST 6447-6544' (Tubb) op 1-3/4 hrs, gas

(Cont'd on card 13-A)

TUBB DST

Lea Rinehart OIL REPORTS

Date: 3-27-57 **Card No.:** 13 NM pf

LEA COUNTY | NEW MEXICO | WILDCAT 15-20-37E

Well: CONTINENTAL OIL CO. #9 Britt B-15 **Result:** NEW OIL DISC

Loc'n:

REMARKS CONTINUED:

vol 2,158,000 CFGPD, GOR 6917-1, FP 1325-1365#, SIP 2695#/15 min; DST 6790-6907' (Drinkard) op 2 hrs, gas 19 min a rate 30,000 CFGPD, rec 1085' free oil & 50' GCM, FP 150-470#, SIP 2650#; DST 7700-34' (Penn) op 3 hrs, rec 2491' oil, no wtr, FP 430-980#, SIP 1365#/30 min; DST 7734-64' (Penn) op 2 hrs, rec 4180' salty sul wtr w/SO, FP 601-1890#, SIP 3960#/20 min; Perf 7712-24', swbd 22 BNO/4 hrs, no wtr; A/500 gals; swbd 1/2 BNOPH/2 hrs sqzd w/100 sx; rec load then swbd, 1/2 BOPH A/1000 gals; rec load then swbd 11 BNOPH/3 hrs; swbd dry.
Tops: B/Salt 2485', Yates 2633', Seven River 2888', Queen 3405', Penrose 3515', Grayb 3698', Glor 5163', Blinebry 5765', Tubb 6300', Drinkard 6618', Abo 6928', Penn 7694'

Lea Rinehart OIL REPORTS

Date: 3-27-57 **Card No.:** 13-A NM pf