



Jerome P. McHugh & Associates
Operating Affiliate: **Nassau Resources, Inc.**
P O Box 809, Farmington, NM 87499-0809
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September 25, 1990

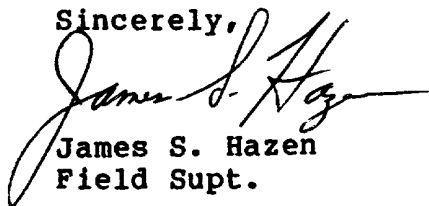
New Mexico Oil Conservation Division
1000 Rio Brazos Rd.
Aztec, NM 87410

RE: NASSAU RESOURCES, INC.
Carracas Unit 34 B #9
Unit I, Sec. 34, T32N, R4W, NMPM
Rio Arriba County, NM

Gentlemen:

I hereby certify that deviation surveys were run on the captioned well as shown on the attached Halliburton Drift Survey.

Sincerely,


James S. Hazen
Field Supt.

cm

Attachments

RECEIVED
SEP 28 1990
OIL CON. DIV.
DIST. 3

State of New Mexico)
) ss
County of San Juan)

Subscribed and sworn to before me this 25th day of Sept., 1990.



OFFICIAL SEAL
FRANCES PERRIN
NOTARY PUBLIC - NEW MEXICO
Notary Bond Filed with Secretary of State
My Commission Expires 5-15-93


Notary Public

LIBURTON
ENGINEERING SERVICES, INC.

DRIFT SURVEY

COMPANY NASSAU RESOURCES, INC.

WELL CARRACAS UNIT 34 B NO.9

FIELD MC FRUITLAND COAL

COUNTY RIO ARRIBA

LOCATION 1800 FSL AND 970 FEL

STATE NM
OTHER SERVICES
SDL-DSN
DIGL

RECEIVED
SEP 28 1990
OIL CON. DIV
DST. 3

SEC. 34	TWP 32N	RGE 4M	ELEV. 7195	ELEV. K.B. 7207
FROM G.L.	12 FT. ABOVE PERM. DATUM		D.F. 7206	G.L. 7195
RED FROM KELLY BUSHING				
9/20/90				
ONE				
4899				
4899				
4899				
CRSING				
9.625#309				
310				
8.75				
HOLE FRESH GEL				
9.2 : 82				
9.5 : 6.0				
LE FLOWLINE				
MP. 2.3 #67				
MP. 2.0 #67				
MP. 2.7 #67				
MC MEAS : MEAS				
1.0 #152				
6 HOURS				
00:30				
152 #10				
4557 IFARM				
J. KOPFMAN				
CHISE				

Fold Here

Service Ticket No.: 500731		API Serial No.:		PGM Version: 2.21			
Change in Mud Type or Additional Samples				RESISTIVITY SCALE CHANGES			
Date/Sample No.	9 /20/90:	/ / :	Type Log	Depth	Scale Up Hole	Scale Down Hole	
Depth-Driller							
Type Fluid							
in Hole							
Dens. : Visc.	:	:					
pH. : Fluid Loss	:	:					
Source of Sample			RESISTIVITY EQUIPMENT DATA				
Rm @ Meas.Temp.	e	e	Run No	Tool Type & No	Pad Type	Tool Pos.	Other
Rmf @ Meas.Temp.	e	e	ONE	DILT W108737		CENT.	
Rmc @ Meas.Temp.	e	e		SGRD W108809			
Source: Rmf:Rmc	:	:					
Rm @ BHT	1.0 e152	e					
Rmf @ BHT	0.9 e152	e					
Rmc @ BHT	1.2 e152	e					
EQUIPMENT DATA							
GAMMA		ACOUSTIC		DENSITY		NEUTRON	
Run No.	ONE	Run No.	ONE	Run No.	ONE	Run No.	ONE
Serial No.	W108582	Serial No.		Serial No.	W109727	Serial No.	W108722
Model No.	NGRT	Model No.		Model No.	SDLT-A	Model No.	DSNT-A
Diameter	3.625	No.of Cent.		Diameter	4.5"	Diameter	3.625
Detector Model No.		Spacing		Log Type	GAMGAM	Log Type	THERNEU
Type	SCINT			Source Type	CS-137	Source Type	AMBE241
Length	4 "	LSA		Serial No.	SDL-103	Serial No.	DSN-93
Distance To Source	N/A	FWDA		Strength	1.5 CI.	Strength	19 CI.
LOGGING DATA							
GENERAL			GAMMA	ACOUSTIC	DENSITY		NEUTRON
Run	Depth		Scale	Scale	Scale		Scale
No.	From	To	Ft/Min	L R	L R Matrix	L R Matrix	L R Matrix
ONE	TD	CSG	40	0 200		2 3 2.65	30 -10 SAND

HALLIBURTON LOGGING SERVICES

Company name: NASSAU RESOURCES, INC.
Well Name: CARRACAS UNIT 34 B NO.9
Well location: RIO ARRIBA, NM
Comments:

*** RECORD OF SURVEY ***
Calculated by WELPRO, version 4.05
Radius of Curvature Method

MEAS.	DRIFT		HOLE	COURSE COORDINATES				TOTAL COORDINATES			
DEPTH	ANGLE	T.V.D.	BEARING	NORTH	SOUTH	EAST	WEST	NORTH	SOUTH	EAST	WEST
				0.0		0.0		0.0		0.0	
310	0.00	310.00	N 24 E	0.0		0.0		0.1		0.0	
350	0.27	350.00	N 24 E	0.1		0.0		0.3		0.3	
400	0.46	400.00	N 79 E	0.2		0.2		0.1		0.5	
450	0.27	450.00	S 25 E		0.1	0.3					
500	0.61	500.00	S 11 E		0.4	0.1			0.2	0.7	
550	0.77	549.99	S 42 W		0.6		0.2		0.	0.5	
600	1.67	599.98	S 32 W		0.8		0.6		1.6		0.1
650	2.67	649.94	S 44 W		1.5		1.2		3.1		1.3
700	3.91	699.86	S 46 W		2.0		2.0		5.1		3.3
750	5.63	749.68	S 43 W		3.0		2.9		8.1		6.2
800	6.57	799.40	S 54 W		3.5		4.0		11.6		10.2
850	7.30	849.03	S 54 W		3.6		4.9		15.2		15.1
900	8.38	898.57	S 52 W		4.1		5.4		19.4		20.5
950	10.36	947.90	S 63 W		4.4		6.9		23.7		27.4
1000	12.42	996.91	S 58 W		4.9		8.6		28.6		35.9
1050	13.94	1045.59	S 59 W		6.0		9.7		34.5		45.7
1100	15.05	1094.00	S 59 W		6.4		10.7		41.0		56.4
1150	15.33	1142.25	S 59 W		6.8		11.2		47.7		67.6
1200	16.42	1190.34	S 60 W		6.9		11.8		54.7		79.4
1250	16.99	1238.23	S 62 W		7.0		12.6		61.7		92.0
1300	16.79	1286.08	S 59 W		7.1		12.7		68.8		104.6
1350	18.18	1333.77	S 64 W		7.2		13.2		75.9		117.8
1400	19.05	1381.15	S 65 W		6.9		14.4		82.8		132.2
1450	19.77	1428.31	S 67 W		6.7		15.2		89.5		147.4
1500	20.25	1475.29	S 67 W		6.6		15.8		96.1		163.2
1550	21.10	1522.07	S 68 W		6.7		16.3		102.8		179.6
1600	22.07	1568.56	S 68 W		6.8		17.1		109.6		196.6
1650	22.53	1614.82	S 68 W		7.0		17.6		116.6		214.3
1700	23.53	1660.84	S 69 W		7.1		18.2		123.7		232.5
1750	24.53	1706.50	S 70 W		7.1		19.1		130.8		251.6
1800	25.41	1751.83	S 71 W		7.1		19.9		137.8		271.5
1850	26.53	1796.78	S 72 W		7.0		20.7		144.9		292.2
1900	27.08	1841.40	S 72 W		7.1		21.4		151.9		313.6
1950	27.98	1885.74	S 73 W		7.1		22.0		159.0		335.6
2000	29.07	1929.67	S 73 W		7.1		22.8		166.0		358.5
2050	29.97	1973.18	S 74 W		7.1		23.6		173.1		382.1
2100	30.97	2016.27	S 73 W		7.2		24.3		180.3		406.4
2150	31.81	2058.95	S 74 W		7.4		25.0		187.7		431.4
2200	33.49	2101.05	S 75 W		7.3		26.0		195.0		457.3
2250	33.38	2142.78	S 75 W		7.2		26.6		202.2		483.9
2300	35.06	2184.12	S 76 W		7.1		27.2		209.4		511.1
2350	33.86	2225.35	S 74 W		7.3		27.3		216.7		538.4
2400	33.35	2266.99	S 73 W		7.8		26.6		224.5		565.0
2450	32.56	2308.95	S 72 W		8.2		25.9		232.6		590.9
2500	31.44	2351.24	S 68 W		9.1		25.1		241.7		616.0

2200	33.49	2101.05 S 75 W	7.3	26.0	195.0	457.3
2250	33.38	2142.78 S 75 W	7.2	26.6	202.2	483.9
2300	35.06	2184.12 S 76 W	7.1	27.2	209.4	511.1
2350	33.86	2225.35 S 74 W	7.3	27.3	216.7	538.4
2400	33.35	2266.99 S 73 W	7.8	26.6	224.5	565.0
2450	32.56	2308.95 S 72 W	8.2	25.9	232.6	590.9
2500	31.94	2351.24 S 68 W	9.1	25.1	241.7	616.0
2550	32.39	2393.56 S 79 W	7.5	25.5	249.2	641.5
2600	32.32	2435.80 S 75 W	6.1	26.1	255.2	667.6
2650	32.89	2477.92 S 72 W	7.6	25.8	262.9	693.4
2700	32.69	2519.95 S 72 W	8.4	25.8	271.2	719.2
2750	32.38	2562.10 S 73 W	8.1	25.6	279.3	744.8
2800	32.42	2604.32 S 73 W	7.8	25.6	287.1	770.4
2850	32.67	2646.47 S 73 W	7.7	25.8	294.9	796.2
2900	33.25	2688.42 S 75 W	7.5	26.1	302.4	822.3
2950	33.00	2730.29 S 76 W	6.9	26.4	309.3	848.8
3000	32.29	2772.40 S 77 W	6.2	26.2	315.5	875.0
3050	32.97	2814.51 S 78 W	5.8	26.3	321.3	901.3
3100	33.47	2856.33 S 77 W	6.1	26.7	327.4	928.0
3150	34.01	2897.91 S 78 W	6.0	27.1	333.4	955.2
3200	34.54	2939.23 S 78 W	5.8	27.6	339.2	982.7
3250	34.61	2980.40 S 78 W	5.9	27.7	345.1	1010.5
3300	34.88	3021.48 S 79 W	5.7	27.9	350.8	1038.4
3350	34.52	3062.59 S 79 W	5.5	27.9	356.3	1066.3
3400	34.83	3103.71 S 78 W	5.7	27.9	362.0	1094.2
3450	32.58	3145.30 S 75 W	6.4	27.0	368.4	1121.2
3500	30.74	3187.86 S 74 W	7.0	25.3	375.4	1146.5
3550	32.24	3230.50 S 73 W	7.5	25.0	382.9	1171.5
3600	32.36	3272.76 S 74 W	7.6	25.6	390.5	1197.1
3650	33.21	3314.80 S 75 W	7.3	26.1	397.8	1223.2
3700	33.33	3356.60 S 74 W	7.3	26.4	405.1	1249.6
3750	33.19	3398.41 S 74 W	7.4	26.4	412.5	1276.0
3800	33.35	3440.21 S 76 W	7.1	26.5	419.6	1302.5
3850	34.25	3481.76 S 76 W	6.7	27.0	426.3	1329.5
3900	33.99	3523.16 S 76 W	6.7	27.2	433.0	1356.7
3950	35.39	3564.27 S 74 W	7.4	27.5	440.4	1384.2
4000	35.00	3605.13 S 74 W	7.8	27.7	448.2	1411.9
4050	36.02	3645.83 S 69 W	9.2	27.5	457.4	1439.5
4100	37.69	3685.83 S 69 W	10.8	28.0	468.2	1467.4
4150	39.07	3725.02 S 68 W	11.3	28.9	479.6	1496.4
4200	41.12	3763.27 S 64 W	13.0	29.5	492.5	1525.8
4250	43.32	3800.30 S 71 W	12.7	31.1	505.3	1556.9
4300	44.05	3836.46 S 65 W	12.7	32.1	518.0	1589.0
4350	43.69	3872.50 S 64 W	14.8	31.3	532.8	1620.3
4400	42.54	3909.00 S 82 W	9.9	32.6	542.6	1652.9
4450	42.72	3945.78 S 82 W	4.7	33.5	547.3	1686.4
4500	42.59	3982.55 S 85 W	4.0	33.6	551.3	1720.1
4550	41.92	4019.56 S 67 W	8.2	32.4	559.5	1752.5
4600	41.97	4056.75 S 83 W	8.8	32.1	568.4	1784.6
4650	41.57	4094.05 S 83 W	4.2	33.0	572.5	1817.7
4700	39.60	4132.01 N 89 W	1.6	32.5	574.1	1850.1
4750	39.63	4170.53 S 88 W	0.2	31.9	574.4	1882.0
4800	40.01	4208.92 S 84 W	2.4	31.9	576.8	1913.9
4850	39.90	4247.25 S 85 W	3.1	32.0	579.9	1945.9
4899	40.09	4284.79 S 75 W	5.5	31.0	585.4	1976.9

HORIZONTAL DEPARTURE = 2061.71 FEET AT SOUTH 73 DEG. 30. MIN. WEST (GRID)