

VOGEL ENGINEERING, INC.

HORIZONTAL AND DIRECTIONAL DRILLING
415 WEST WALL ST. MIDLAND TX 79707
915-570-4719

PEDCO

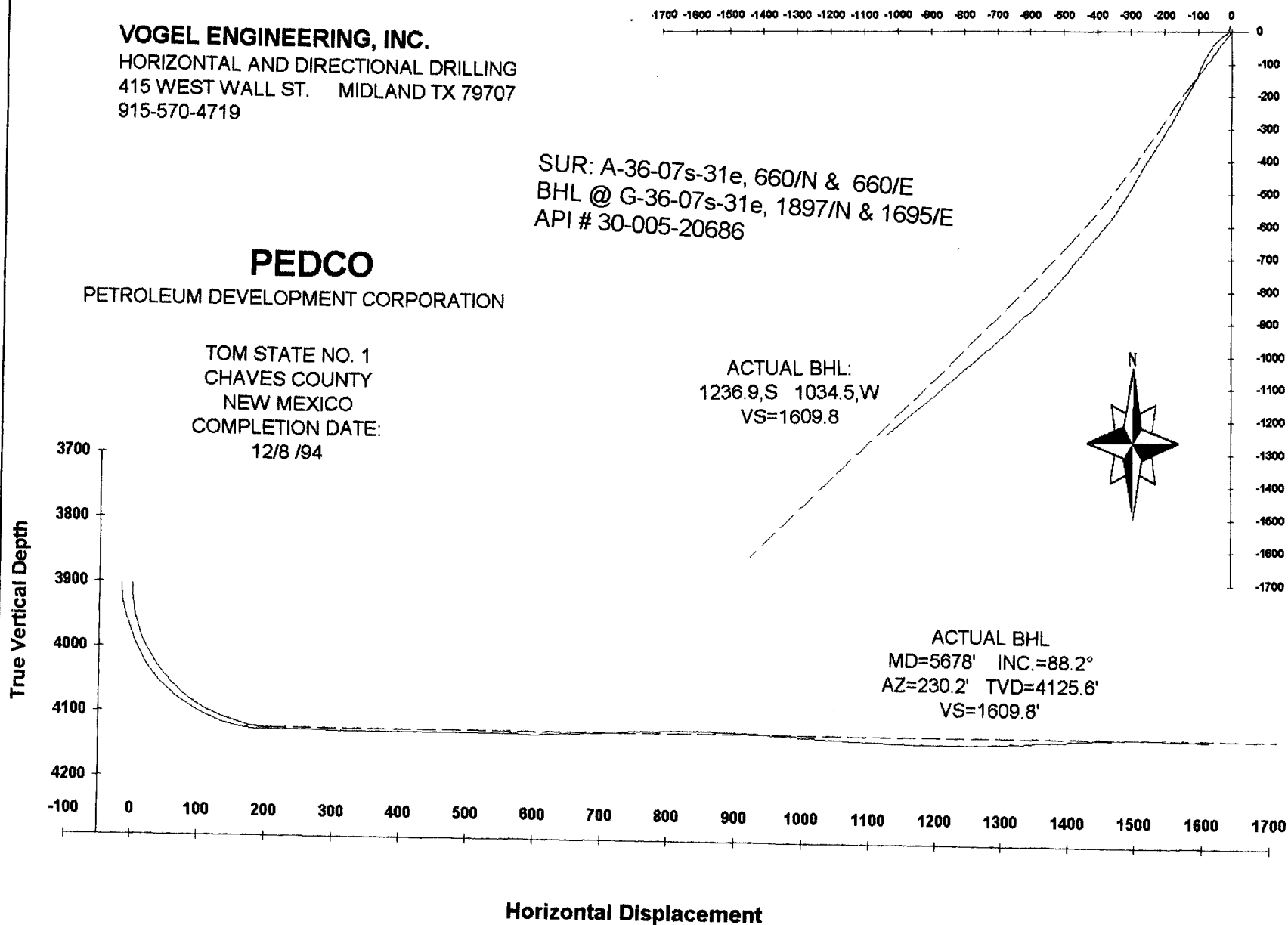
PETROLEUM DEVELOPMENT CORPORATION

TOM STATE NO. 1
CHAVES COUNTY
NEW MEXICO
COMPLETION DATE:
12/8 /94

SUR: A-36-07s-31e, 660/N & 660/E
BHL @ G-36-07s-31e, 1897/N & 1695/E
API # 30-005-20686

ACTUAL BHL:
1236.9,S 1034.5,W
VS=1609.8

ACTUAL BHL
MD=5678' INC.=88.2°
AZ=230.2' TVD=4125.6'
VS=1609.8'



OPERATOR
PEDCO
 PETROLEUM DEVELOPMENT CORPORATION
TOM STATE 36 No. 1

DIRECTIONAL DRILLING COMPANY
VOGEL ENGINEERING, INC.
 415 WEST WALL STREET MIDLAND TX 79707
 915-570-4719

Target Az: 216.59
 Target TVD: 4124

Start Date: 12/3/1994
 End Date: 12/8/1994

MD	INC	AZ	TVD	Vert. Section	Coordinates		Closure	Build Rate	Walk Rate
					N-S	E-W			
3904.0	0.5	351.3	3903.7	-16.4	22.0	-2.2	22.1		
3910.0	3.0	208.3	3909.7	-16.3	22.0	-2.3	22.1	0.42	-23.83
3926.0	8.0	199.2	3925.7	-14.8	20.6	-3.0	20.8	0.31	-0.57
3942.0	13.6	197.2	3941.4	-11.9	17.8	-3.9	18.2	0.35	-0.13
3953.0	16.6	195.7	3952.0	-9.2	15.0	-4.7	15.7	0.27	-0.14
3963.0	19.3	192.2	3961.5	-6.4	12.0	-5.4	13.2	0.27	-0.35
3974.0	21.3	195.4	3971.8	-2.9	8.3	-6.4	10.5	0.18	0.29
3985.0	22.0	203.2	3982.0	1.0	4.5	-7.7	8.9	0.06	0.71
3995.0	22.7	211.9	3991.3	4.7	1.1	-9.5	9.5	0.07	0.87
4005.0	23.7	219.8	4000.5	8.7	-2.1	-11.8	11.9	0.10	0.79
4021.0	26.8	228.0	4015.0	15.5	-7.0	-16.5	17.9	0.19	0.51
4037.0	31.8	229.4	4028.9	23.1	-12.2	-22.4	25.5	0.31	0.09
4068.0	42.3	227.3	4053.6	41.4	-24.6	-36.3	43.9	0.34	-0.07
4100.0	52.6	222.5	4075.2	64.7	-41.3	-53.0	67.2	0.32	-0.15
4133.0	58.3	212.1	4093.9	91.9	-62.9	-69.4	93.7	0.17	-0.32
4166.0	65.6	202.5	4109.4	120.6	-88.8	-82.8	121.4	0.22	-0.29
4182.0	70.5	201.5	4115.4	135.0	-102.5	-88.4	135.4	0.31	-0.06
4199.0	76.3	202.0	4120.3	150.8	-117.7	-94.4	150.9	0.34	0.03
4211.0	80.1	203.0	4122.7	162.1	-128.5	-98.9	162.2	0.32	0.08
4230.0	86.7	206.4	4124.9	180.6	-145.7	-106.8	180.6	0.35	0.18
4242.0	89.3	207.5	4125.3	192.4	-156.4	-112.2	192.5	0.22	0.09
4261.0	89.4	207.6	4125.6	211.2	-173.2	-121.0	211.3	0.01	0.01
4292.0	89.5	208.0	4125.8	241.8	-200.6	-135.5	242.1	0.00	0.01
4324.0	88.1	207.1	4126.5	273.4	-229.0	-150.3	273.9	-0.04	-0.03
4356.0	89.1	207.8	4127.3	305.0	-257.4	-165.0	305.7	0.03	0.02
4385.0	90.7	210.1	4127.4	333.8	-282.8	-179.0	334.7	0.06	0.08
4418.0	90.1	209.7	4127.1	366.5	-311.4	-195.5	367.6	-0.02	-0.01
4515.0	89.8	212.7	4127.2	463.1	-394.3	-245.7	464.6	0.00	0.03
4612.0	89.5	209.8	4127.8	559.7	-477.3	-296.1	561.6	0.00	-0.03
4645.0	90.0	209.5	4127.9	592.4	-505.9	-312.4	594.6	0.02	-0.01
4678.0	91.5	212.4	4127.5	625.3	-534.2	-329.4	627.6	0.05	0.09
4706.0	92.8	215.4	4126.5	653.2	-557.5	-345.0	655.6	0.05	0.11
4738.0	93.0	217.5	4124.8	685.2	-583.2	-364.0	687.4	0.01	0.07
4770.0	93.3	219.6	4123.1	717.1	-608.2	-383.9	719.2	0.01	0.07

4802.0	92.0	219.8	4121.6	749.0	-632.7	-404.3	750.9	-0.04	0.01
4835.0	90.8	220.0	4120.8	782.0	-658.1	-425.4	783.6	-0.04	0.01
4852.0	91.1	217.0	4120.5	799.0	-671.4	-436.0	800.5	0.02	-0.18
4875.0	90.5	218.4	4120.2	822.0	-689.6	-450.1	823.4	-0.03	0.06
4906.0	89.4	218.6	4120.2	852.9	-713.8	-469.4	854.3	-0.04	0.01
4938.0	88.3	219.1	4120.9	884.9	-738.7	-489.5	886.2	-0.03	0.02
4969.0	87.0	220.8	4122.1	915.8	-762.5	-509.3	917.0	-0.04	0.05
4981.0	86.8	220.0	4122.8	927.8	-771.6	-517.1	928.9	-0.02	-0.07
5029.0	86.6	222.3	4125.5	975.5	-807.7	-548.6	976.4	0.00	0.05
5063.0	86.7	225.6	4127.5	1009.2	-832.1	-572.2	1009.9	0.00	0.10
5097.0	87.7	227.3	4129.2	1042.7	-855.5	-596.8	1043.1	0.03	0.05
5130.0	87.8	227.0	4130.5	1075.1	-877.9	-621.0	1075.4	0.00	-0.01
5193.0	87.5	227.9	4133.1	1136.9	-920.5	-667.4	1137.0	0.00	0.01
5225.0	88.3	228.1	4134.2	1168.3	-941.9	-691.1	1168.3	0.02	0.01
5257.0	90.9	228.8	4134.5	1199.6	-963.1	-715.1	1199.6	0.08	0.02
5290.0	89.4	228.0	4134.4	1231.9	-985.0	-739.8	1231.9	-0.05	-0.02
5321.0	90.5	228.8	4134.4	1262.2	-1005.6	-762.9	1262.3	0.04	0.03
5355.0	92.6	229.6	4133.5	1295.4	-1027.8	-788.7	1295.5	0.06	0.02
5386.0	93.0	229.4	4132.0	1325.6	-1047.9	-812.2	1325.8	0.01	-0.01
5419.0	93.4	229.1	4130.1	1357.7	-1069.5	-837.2	1358.2	0.01	-0.01
5451.0	93.3	229.2	4128.3	1388.9	-1090.3	-861.3	1389.5	0.00	0.00
5483.0	92.8	229.3	4126.6	1420.1	-1111.2	-885.5	1420.9	-0.02	0.00
5515.0	92.9	229.2	4125.0	1451.2	-1132.1	-909.8	1452.3	0.00	0.00
5544.0	92.1	230.3	4123.7	1479.5	-1150.8	-931.9	1480.8	-0.03	0.04
5559.0	91.0	230.1	4123.3	1494.0	-1160.4	-943.4	1495.5	-0.07	-0.01
5579.0	89.6	229.7	4123.2	1513.5	-1173.3	-958.7	1515.1	-0.07	-0.02
5643.0	88.1	230.1	4124.5	1575.8	-1214.5	-1007.6	1578.1	-0.02	0.01
5650.0	88.2	230.2	4124.7	1582.6	-1219.0	-1013.0	1584.9	0.01	0.01
5678.0	88.2	230.2	4125.6	1609.8	-1236.9	-1034.5	1612.5	0.00	0.00

SCIENTIFIC DRILLING INTERNATIONAL
MIDLAND, TEXAS

Finder Survey
for

Job Number : 32F0694192
Well Number : TOM STATE "36" NO. 1
Site Location : CHAVES COUNTY, NEW MEXICO
Latitude : 33.830
Survey Date(s) : 06-JUN-94
S.D.C. personnel : GARY DESPAIN
Calculation Method : Minimum Curvature
Survey Depth Zero : RKB
Proposal Direction :
Depth Unit : Feet

Comments :
FINDER GYRO (0-4000')

Inrun Survey

Well number : TOM STATE "36" NO.

Date : 06-JUN-94

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates		D-leg /100ft
					Latitude	Departure	
0.0	0.00	0.0	0.00	0.00	0.00	0.00	0.00
100.0	100.00	0.2	0.68	66.10	0.24	0.54	0.68
200.0	199.99	0.7	0.42	50.43	0.71	1.37	0.30
300.0	299.99	1.2	0.47	57.52	1.17	2.00	0.07
400.0	399.99	1.5	0.43	66.41	1.54	2.69	0.08
500.0	499.98	1.6	0.32	108.65	1.60	3.29	0.29
600.0	599.98	1.4	0.27	123.97	1.38	3.75	0.09
700.0	699.98	1.1	0.18	136.50	1.13	4.06	0.10
800.0	799.98	1.0	0.13	122.84	0.96	4.26	0.06
900.0	899.98	0.8	0.28	103.56	0.84	4.59	0.16
1000.0	999.98	0.5	0.34	148.64	0.53	4.99	0.24
1100.0	1099.98	-0.1	0.53	146.77	-0.11	5.39	0.19
1200.0	1199.97	-0.9	0.48	150.53	-0.86	5.85	0.06
1300.0	1299.97	-1.5	0.34	141.56	-1.46	6.24	0.15
1400.0	1399.97	-2.0	0.67	125.18	-2.03	6.91	0.36
1500.0	1499.96	-2.7	0.49	134.15	-2.67	7.69	0.20
1600.0	1599.95	-3.2	0.73	115.96	-3.24	8.57	0.31
1700.0	1699.95	-4.0	0.64	143.62	-3.97	9.47	0.34
1800.0	1799.95	-4.0	0.46	345.56	-4.03	9.71	1.08
1900.0	1899.94	-3.3	0.46	332.78	-3.29	9.42	0.10
2000.0	1999.94	-2.2	0.85	349.05	-2.20	9.10	0.43
2100.0	2099.93	-0.9	0.73	339.18	-0.88	8.73	0.18
2200.0	2199.92	0.4	0.86	336.46	0.41	8.20	0.14
2300.0	2299.91	1.6	0.62	341.45	1.61	7.73	0.25
2400.0	2399.90	2.7	0.71	329.92	2.66	7.25	0.16
2500.0	2499.89	3.9	0.85	336.95	3.88	6.65	0.17
2600.0	2599.88	5.2	0.77	335.05	5.17	6.08	0.08
2700.0	2699.87	6.3	0.82	315.22	6.28	5.29	0.28
2800.0	2799.86	7.4	0.76	327.88	7.35	4.43	0.18
2900.0	2899.85	8.6	0.93	329.28	8.61	3.66	0.17
3000.0	2999.84	10.1	0.99	339.68	10.12	2.95	0.18
3100.0	3099.82	11.7	0.95	333.01	11.67	2.27	0.12
3200.0	3199.81	13.2	0.98	335.85	13.19	1.55	0.06
3300.0	3299.80	14.6	0.72	337.62	14.55	0.96	0.26
3400.0	3399.79	15.9	0.95	334.44	15.88	0.36	0.23
3500.0	3499.78	17.2	0.79	329.24	17.22	-0.35	0.18
3600.0	3599.76	18.6	0.96	334.06	18.57	-1.07	0.19
3700.0	3699.75	19.9	0.68	353.63	19.91	-1.50	0.39
3800.0	3799.75	21.0	0.66	333.45	21.01	-1.82	0.24

Inrun Survey

Well number : TOM STATE "36" NO.

Date : 06-JUN-94

Measured Depth	Vertical Depth	Vert. Section	Inc Deg	Azimuth Deg	Coordinates		D-leg
					Latitude	Departure	/100ft
3904.0	3903.74	22.0	0.48	351.30	21.98	-2.16	0.24
4000.0	3999.74	22.6	0.32	21.35	22.63	-2.12	0.27

At Bottom Hole Location: Measured Depth Horiz. Displ. Closure Dir.
 = 4000.0 = 22.726 = 354.645