

DISTRICT I  
P.O. Box 1980, Hobbs, NM 88241-1380

DISTRICT II  
P.O. Box Drawer DD, Artesia, NM 88211-0719

DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410

DISTRICT IV  
P.O. Box 2088, Santa Fe, NM 87504-2088

State of New Mexico  
Energy, Minerals and Natural Resources Department

**OIL CONSERVATION DIVISION**

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-101  
Revised February 10, 1994  
Instructions on back  
Submit to Appropriate District Office  
State Lease - 6 Copies  
Fee Lease - 5 Copies

AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

<sup>1</sup> Operator Name and Address TEXACO EXPLORATION & PRODUCTION INC. 205 E. Bender, HOBBS, NM 88240		<sup>2</sup> OGRID Number 022351
<sup>4</sup> Property Code 11125	<sup>5</sup> Property Name VACUUM GLORIETA WEST UNIT	<sup>3</sup> API Number 30 025 32270
		<sup>6</sup> Well No. 70

<sup>7</sup> Surface Location

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	35	17S	34E		2008	NORTH	1668	EAST	LEA

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

UI or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
J	35	17S	34E		1832	South	1568	East	Lea

<sup>9</sup> Proposed Pool 1 Vacuum Glorieta (unitized interval)	<sup>10</sup> Proposed Pool 2
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<sup>11</sup> Work Type Code P	<sup>12</sup> Well Type Code O	<sup>13</sup> Rotary or C.T. R	<sup>14</sup> Lease Type Code S	<sup>15</sup> Ground Level Elevation GR-4012', KB-4026'
<sup>16</sup> Multiple No	<sup>17</sup> Proposed Depth 6000 TVD	<sup>18</sup> Formation Upper Paddock	<sup>19</sup> Contractor Unknown	<sup>20</sup> Spud Date 11/7/97

<sup>21</sup> Proposed Casing and Cement Program

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
11"	8 5/8"		1520'	650 SX, CIRC 210 SX	
7 7/8"	5 1/2"		6320'	1950 SX, CIRC 250 SX	

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Objective: Texaco intends to directionally drill a 1444' horizontal lateral section from the subject existing wellbore.

- MIRU pulling unit. Set CIBP @ 5880'.
- Run in hole with whipstock. Run Gyro survey to orient whipstock - whipstock face should have azimuth of 176.7°. Set whipstock on CIBP @ 5880'.
- Run in hole with starting mill to establish cut in casing (KOP @ 5860'). TOH with starting mill. TIH with watermelon mill, drillpipe, and drill collars. Mill ~10' window.
- Drill 110' radius build section with EOB @ 5970' TVD.
- Directionally drill horizontal section 1444' from surface location. TOH with drill equipment.
- Acid stimulate horizontal section of well with a 29,000 gallon 15% HCL DSP coiled tubing treatment.
- Run in hole with submersible pumping equipment. Return well to production. Place on test.

*Directionally*

<sup>23</sup> I hereby certify that the rules and regulations of the Oil Conservation Division have been complied with and that the information given above is true and complete to the best of my knowledge and belief.

Signature *Darrell J. Carriger*

Printed Name Darrell J. Carriger

Title Prod. Engineer

Date 10/29/97 Telephone 397-0426

**OIL CONSERVATION DIVISION**

APPROVED BY CHRIS WILLIAMS  
DISTRICT I SUPERVISOR

Approved By:

Title:

Approval Date: NOV 4 1997 Expiration Date:

Conditions of Approval:  
Attached

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

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State of New Mexico  
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-102

Revised February 10, 1994

Instructions on back  
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State Lease - 4 Copies  
Fee Lease - 3 Copies

AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

<sup>1</sup> API Number 3002532270		<sup>2</sup> Pool Code 62160		<sup>3</sup> Pool Name VACUUM GLORIETA	
<sup>4</sup> Property Code 11125		<sup>5</sup> Property Name VACUUM GLORIETA WEST UNIT			<sup>6</sup> Well No. 70
<sup>7</sup> OGRID Number 022351		<sup>8</sup> Operator Name TEXACO EXPLORATION & PRODUCTION INC.			<sup>9</sup> Elevation GR-4012', KB-4026'

<sup>10</sup> Surface Location

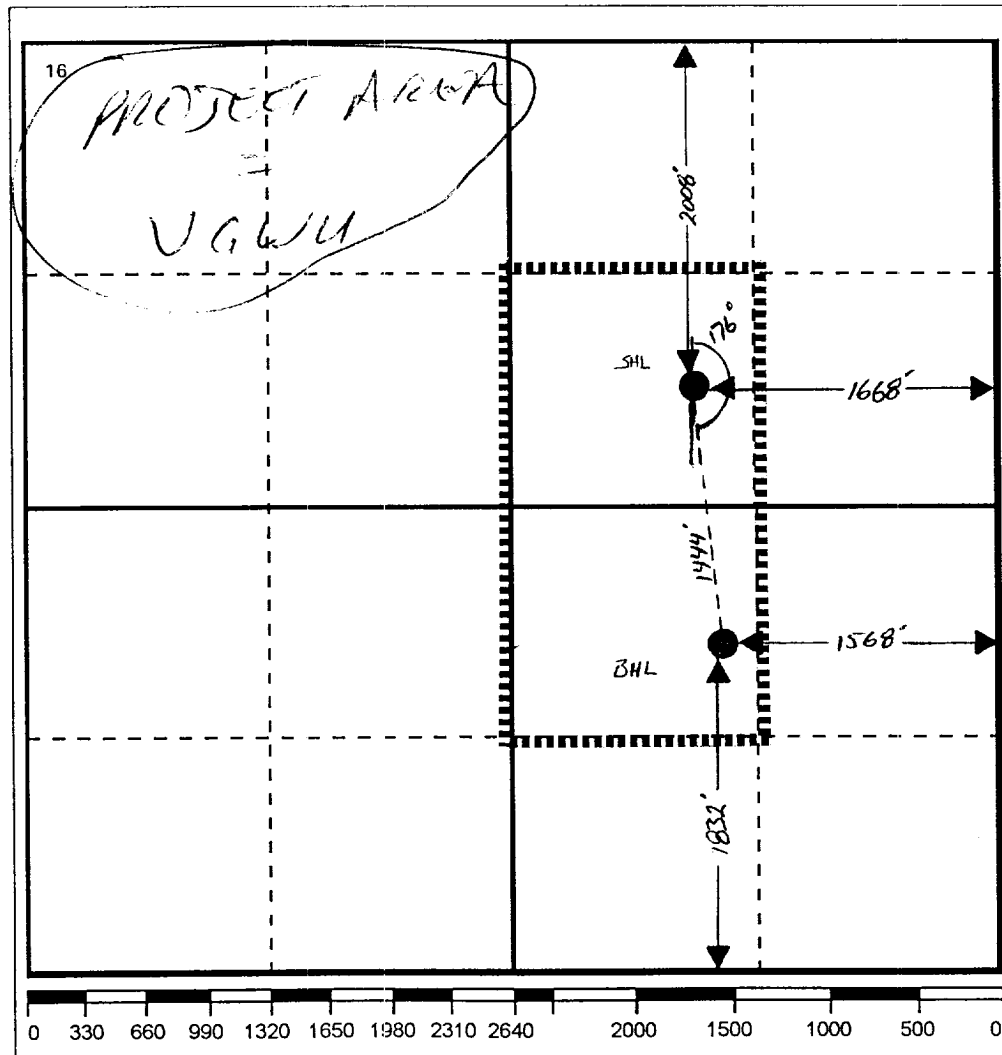
Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
G	35	17S	34E		2008	NORTH	1668	EAST	LEA

<sup>11</sup> Bottom Hole Location If Different From Surface

Ul or lot no.	Section	Township	Range	Lot.Idn	Feet From The	North/South Line	Feet From The	East/West Line	County
J	35	17S	34E		1832	South	1568	East	Lea

<sup>12</sup> Dedicated Acres 80	<sup>13</sup> Joint or Infill No	<sup>14</sup> Consolidation Code	<sup>15</sup> Order No.
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NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



**17 OPERATOR CERTIFICATION**

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief

Signature: *Darrell J. Carriger*

Printed Name: Darrell J. Carriger

Position: Prod. Engineer

Date: 10/28/97

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**18 SURVEYOR CERTIFICATION**

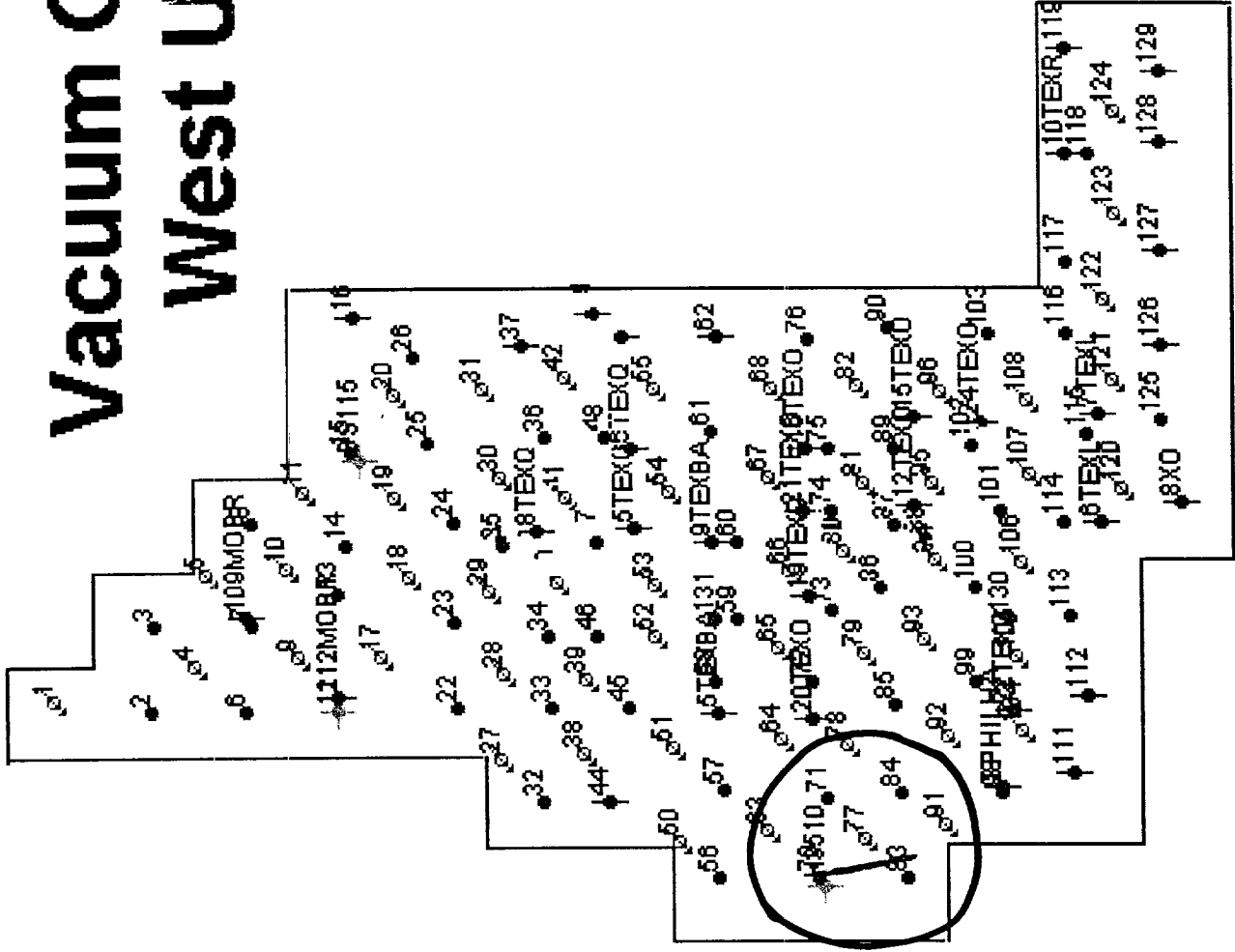
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed:

Signature & Seal of Professional Surveyor:

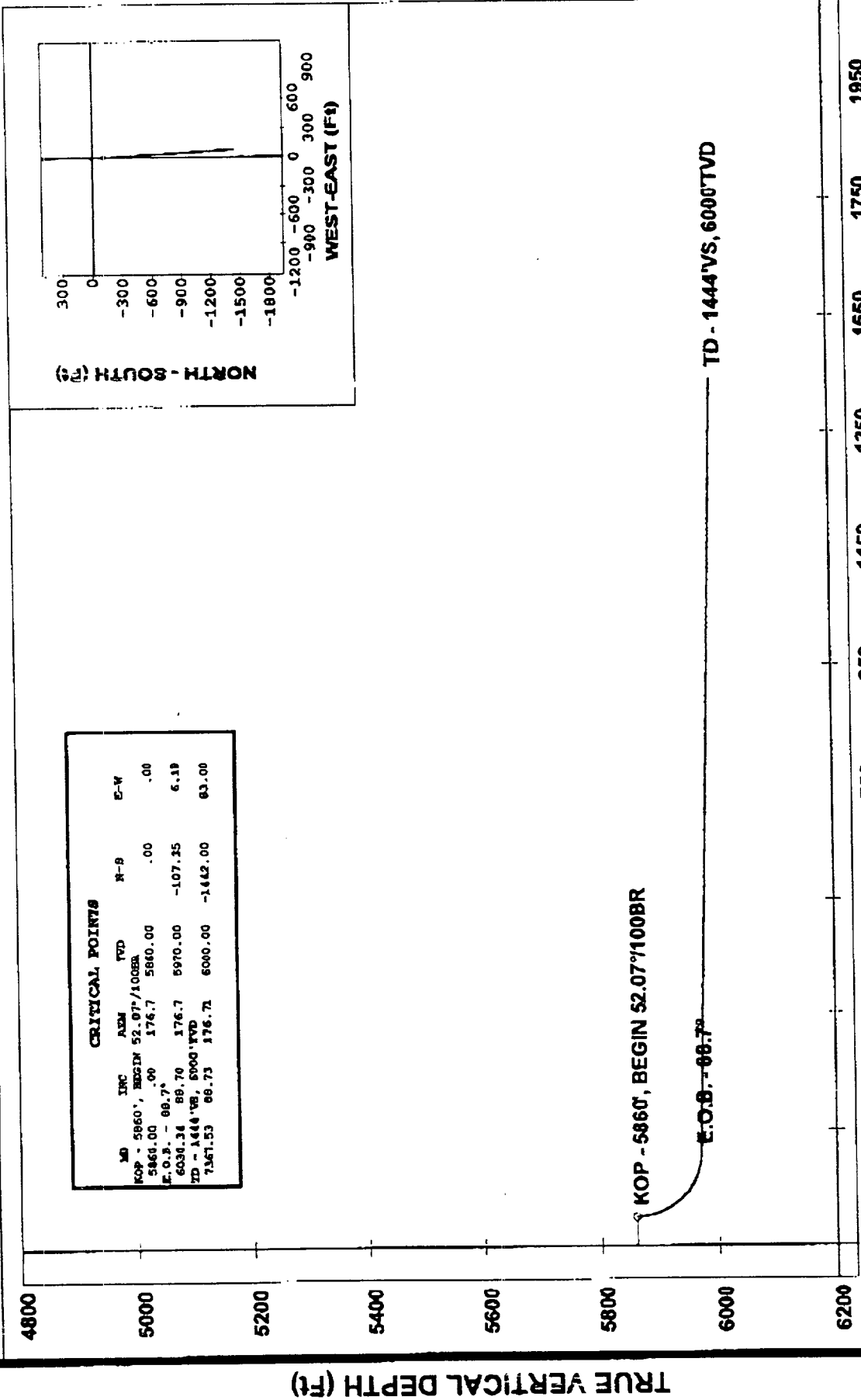
Certificate No.:

# Vacuum Glorieta West Unit



Date/Time: 28-Oct-97 / 15:50

Company: TEXACO E & P  
 Lease/Well: V.G.W.U. #70  
 Location: LEA COUNTY, NM  
 Rig Name: YALE E. KEY #119  
 Grd: 9.3  
 File name: C:\WINSERVER\VGWU#70.SVY



o - VGWU#70(REV.1)10/28  
 VERTICAL SECTION (Ft) @ 176.70°



Job Number:  
 Company: TEXACO E & P  
 Lease/Wel: V.G.W.U. #70  
 Location: LEA COUNTY, NM  
 Rig Name: YALE E. KEY #119  
 RKB:  
 G.L. or M.S.L.:

State/Country: NM, USA  
 Declination:  
 Grid: 9.3  
 File name: C:\WINSERVE\VGWU#70.SVY  
 Date/Time: 28-Oct-97 / 15:50  
 Curve Name: VGWU#70(REV.1)10/28

PHOENIX DRILLING SERVICES, INC.

WINSERVE SURVEY CALCULATIONS  
 Minimum Curvature Method  
 Vertical Section Plane 176.70

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	CLOSURE Distance FT	CLOSURE Direction Deg	Dogleg Severity Deg/100
<b>KOP - 5860', BEGIN 52.07'/100BR</b>										
5860.00	.00	176.70	5860.00	-5860.00	.00	.00	.00	.00	.00	.00
5870.00	5.21	176.70	5869.99	-5869.99	-.45	.03	.45	.45	176.70	52.07
5880.00	10.41	176.70	5879.89	-5879.89	-1.81	.10	1.81	1.81	176.70	52.07
5890.00	15.62	176.70	5889.63	-5889.63	-4.06	.23	4.06	4.06	176.70	52.07
5900.00	20.83	176.70	5899.12	-5899.12	-7.18	.41	7.19	7.19	176.70	52.07
5910.00	26.04	176.70	5908.30	-5908.30	-11.15	.64	11.17	11.17	176.70	52.07
5920.00	31.24	176.70	5917.07	-5917.07	-15.93	.92	15.96	15.96	176.70	52.07
5930.00	36.45	176.70	5925.37	-5925.37	-21.49	1.24	21.53	21.53	176.70	52.07
5940.00	41.66	176.70	5933.14	-5933.14	-27.78	1.60	27.82	27.82	176.70	52.07
5950.00	46.87	176.70	5940.29	-5940.29	-34.74	2.00	34.80	34.80	176.70	52.07
5960.00	52.07	176.70	5946.79	-5946.79	-42.33	2.44	42.40	42.40	176.70	52.07

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
								Distance FT	Direction Deg	
5970.00	57.28	176.70	5952.57	-5952.57	-50.47	2.91	50.56	176.70	52.07	
5980.00	62.49	176.70	5957.59	-5957.59	-59.10	3.41	59.20	176.70	52.07	
5990.00	67.70	176.70	5961.80	-5961.80	-68.16	3.93	68.27	176.70	52.07	
6000.00	72.90	176.70	5965.17	-5965.17	-77.55	4.47	77.68	176.70	52.07	
6010.00	78.11	176.70	5967.67	-5967.67	-87.21	5.03	87.36	176.70	52.07	
6020.00	83.32	176.70	5969.28	-5969.28	-97.06	5.60	97.22	176.70	52.07	
6030.00	88.52	176.70	5969.99	-5969.99	-107.02	6.17	107.20	176.70	52.07	
<b>E.O.B. - 88.7°</b>										
6030.34	88.70	176.70	5970.00	-5970.00	-107.35	6.19	107.53	176.70	52.07	
6060.34	88.70	176.70	5970.68	-5970.68	-137.30	7.92	137.53	176.70	.00	
6090.34	88.70	176.70	5971.36	-5971.36	-167.24	9.64	167.52	176.70	.00	
6120.34	88.70	176.70	5972.04	-5972.04	-197.18	11.37	197.51	176.70	.00	
6150.34	88.70	176.70	5972.72	-5972.72	-227.12	13.09	227.50	176.70	.00	
6180.34	88.70	176.70	5973.40	-5973.40	-257.07	14.82	257.49	176.70	.00	
6210.34	88.70	176.70	5974.08	-5974.08	-287.01	16.55	287.49	176.70	.00	
6240.34	88.70	176.70	5974.76	-5974.76	-316.95	18.27	317.48	176.70	.00	
6270.34	88.71	176.70	5975.43	-5975.43	-346.90	20.00	347.47	176.70	.00	
6300.34	88.71	176.70	5976.11	-5976.11	-376.84	21.72	377.46	176.70	.00	
6330.34	88.71	176.70	5976.79	-5976.79	-406.78	23.45	407.46	176.70	.00	
6360.34	88.71	176.70	5977.47	-5977.47	-436.72	25.17	437.45	176.70	.00	
6390.34	88.71	176.70	5978.14	-5978.14	-466.67	26.90	467.44	176.70	.00	
6420.34	88.71	176.70	5978.82	-5978.82	-496.61	28.62	497.43	176.70	.00	
6450.34	88.71	176.70	5979.50	-5979.50	-526.55	30.35	527.43	176.70	.00	
6480.34	88.71	176.70	5980.17	-5980.17	-556.49	32.07	557.42	176.70	.00	
6510.34	88.71	176.70	5980.85	-5980.85	-586.44	33.80	587.41	176.70	.00	
6540.34	88.71	176.70	5981.52	-5981.52	-616.38	35.52	617.40	176.70	.00	
6570.34	88.71	176.71	5982.20	-5982.20	-646.32	37.24	647.40	176.70	.00	
6600.34	88.71	176.71	5982.87	-5982.87	-676.27	38.97	677.39	176.70	.00	
6630.34	88.71	176.71	5983.55	-5983.55	-706.21	40.69	707.38	176.70	.00	
6660.34	88.71	176.71	5984.22	-5984.22	-736.15	42.41	737.37	176.70	.00	

Measured Depth FT	Incl Angle Deg	Drift Direction Deg	True Vertical Depth	Subsea TVD FT	N-S FT	E-W FT	Vertical Section FT	CLOSURE		Dogleg Severity Deg/100
								Distance FT	Direction Deg	
6690.34	88.71	176.71	5984.89	-5984.89	-766.09	44.14	767.36	176.70	.00	
6720.34	88.71	176.71	5985.57	-5985.57	-796.04	45.86	797.36	176.70	.00	
6750.34	88.72	176.71	5986.24	-5986.24	-825.98	47.58	827.35	176.70	.00	
6780.34	88.72	176.71	5986.91	-5986.91	-855.92	49.31	857.34	176.70	.00	
6810.34	88.72	176.71	5987.58	-5987.58	-885.87	51.03	887.33	176.70	.00	
6840.34	88.72	176.71	5988.25	-5988.25	-915.81	52.75	917.33	176.70	.00	
6870.34	88.72	176.71	5988.92	-5988.92	-945.75	54.47	947.32	176.70	.00	
6900.34	88.72	176.71	5989.60	-5989.60	-975.70	56.20	977.31	176.70	.00	
6930.34	88.72	176.71	5990.27	-5990.27	-1005.64	57.92	1007.30	176.70	.00	
6960.34	88.72	176.71	5990.94	-5990.94	-1035.58	59.64	1037.30	176.70	.00	
6990.34	88.72	176.71	5991.61	-5991.61	-1065.52	61.36	1067.29	176.70	.00	
7020.34	88.72	176.71	5992.28	-5992.28	-1095.47	63.08	1097.28	176.70	.00	
7050.34	88.72	176.71	5992.95	-5992.95	-1125.41	64.81	1127.27	176.70	.00	
7080.34	88.72	176.71	5993.61	-5993.61	-1155.35	66.53	1157.27	176.70	.00	
7110.34	88.72	176.71	5994.28	-5994.28	-1185.30	68.25	1187.26	176.70	.00	
7140.34	88.72	176.71	5994.95	-5994.95	-1215.24	69.97	1217.25	176.70	.00	
7170.34	88.72	176.71	5995.62	-5995.62	-1245.18	71.69	1247.25	176.70	.00	
7200.34	88.73	176.71	5996.29	-5996.29	-1275.13	73.41	1277.24	176.70	.00	
7230.34	88.73	176.71	5996.95	-5996.95	-1305.07	75.13	1307.23	176.71	.00	
7260.34	88.73	176.71	5997.62	-5997.62	-1335.01	76.85	1337.22	176.71	.00	
7290.34	88.73	176.71	5998.29	-5998.29	-1364.96	78.57	1367.22	176.71	.00	
7320.34	88.73	176.71	5998.95	-5998.95	-1394.90	80.29	1397.21	176.71	.00	
7350.34	88.73	176.71	5999.62	-5999.62	-1424.84	82.01	1427.20	176.71	.00	
<b>TD - 1444'VS, 6000'TVD</b>										
7367.53	88.73	176.71	6000.00	-6000.00	-1442.00	83.00	1444.39	176.71	.00	