

BECHFELD
DRILLING SERVICES

January 29, 1996

Mr. Ernie Busch
NM Energy, Minerals & Natural Resources Dept.
1000 Rio Brazos Road
Aztec, New Mexico 87410

RECEIVED
FEB - 5 1996
OIL CON. DIV.
BUREAU

Re: JICARILLA NO. 35
RIO ARRIBA CO., NM

Dear Mr. Busch,

Please find attached the survey reports for the above referenced well. I certify that these are true and correct to the best of my knowledge.

Sincerely,

David B. Gaudin

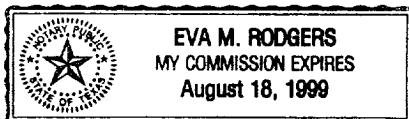
David B. Gaudin
District Engineer/Asst. Operations Mgr.

DBG/wli

State of Texas
County of Harris

SWORN TO AND SUBSCRIBED before me on the 2nd day of
February, 1996.

(seal)



Eva M. Rodgers
Notary Public Signature

BECFIELD
 JAN - 8 1995
 OIL CORP. LOG
 5381.2

< **BECFIELD SURVEY AND TARGET TRACKING PROGRAM** >

OPERATOR: TEXACO, INC.
WELL: JICARILLA "C" NO. 35
LOCATION: RIO ARRIBA COUNTY, NEW MEXICO

START: 11/27/95
FINISH: 12/17/95
BECFIELD DIR.COORD.
 STEVE BLOUNT
 ALAN PEDERSON
 11.2 degs applied = TRUE

Survey number 0 is a Tie-In to a
 GYRO survey run by SCIENTIFIC DRILLING

< **MINIMUM CURVATURE CALCULATIONS(SPE-3362)** **PROPOSED DIR.** 90.00 >

SUR NUM	MD	INC	TRUE AZM	TVD	N-S	E-W	SECT	DLS/ 100
0	5950	1.07	210.68	5947.15	-123.24	-108.29	-108.29	0.18
1	5987	1.10	150.00	5984.14	-123.84	-108.29	-108.29	2.96
2	5990	1.00	146.30	5987.14	-123.89	-108.26	-108.26	4.03
3	5992	1.20	133.40	5989.14	-123.92	-108.23	-108.23	15.86
4	5994	1.70	117.60	5991.14	-123.95	-108.19	-108.19	31.79
5	5996	2.40	110.50	5993.14	-123.98	-108.13	-108.13	37.17
6	5998	3.10	106.00	5995.14	-124.01	-108.04	-108.04	36.60
7	6000	3.90	103.00	5997.14	-124.04	-107.92	-107.92	41.02
8	6002	4.80	101.30	5999.13	-124.07	-107.77	-107.77	45.45
9	6004	6.00	99.70	6001.12	-124.10	-107.58	-107.58	60.46
10	6006	7.10	99.20	6003.11	-124.14	-107.36	-107.36	55.07
11	6008	8.00	99.20	6005.09	-124.18	-107.10	-107.10	45.00
12	6010	8.90	98.80	6007.07	-124.23	-106.81	-106.81	45.10
13	6012	9.80	98.70	6009.04	-124.28	-106.49	-106.49	45.01
14	6014	10.60	98.70	6011.01	-124.33	-106.14	-106.14	40.00
15	6016	11.60	98.70	6012.97	-124.39	-105.76	-105.76	50.00
16	6018	12.50	98.70	6014.93	-124.45	-105.35	-105.35	45.00
17	6020	13.30	98.70	6016.88	-124.52	-104.90	-104.90	40.00
18	6022	14.10	98.70	6018.82	-124.59	-104.44	-104.44	40.00
19	6024	14.90	98.70	6020.76	-124.67	-103.94	-103.94	40.00
20	6026	15.70	98.70	6022.69	-124.75	-103.42	-103.42	40.00
21	6028	16.50	98.70	6024.61	-124.83	-102.87	-102.87	40.00
22	6030	17.40	98.70	6026.52	-124.92	-102.29	-102.29	45.00
23	6032	18.30	95.80	6028.43	-125.00	-101.69	-101.69	63.24
24	6034	19.00	94.00	6030.32	-125.05	-101.05	-101.05	45.31
25	6036	20.00	92.60	6032.21	-125.09	-100.38	-100.38	55.19
26	6038	21.00	92.10	6034.08	-125.12	-99.68	-99.68	50.76
27	6040	22.00	91.50	6035.94	-125.14	-98.95	-98.95	51.19
28	6042	23.10	91.00	6037.79	-125.16	-98.18	-98.18	55.83
29	6044	24.20	90.80	6039.62	-125.17	-97.38	-97.38	55.15
30	6046	25.40	90.60	6041.43	-125.18	-96.54	-96.54	60.15

<

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MINIMUM CURVATURE CALCULATIONS(SPE-3362)

>

PROPOSED DIR.

90.00

SUR			TRUE					DLS/
NUM	MD	INC	AZM	TVD	N-S	E-W	SECT	100
31	6048	26.40	90.60	6043.23	-125.19	-95.67	-95.67	50.00
32	6050	27.60	90.40	6045.02	-125.20	-94.76	-94.76	60.17
33	6052	28.50	90.30	6046.78	-125.20	-93.82	-93.82	45.06
34	6054	29.50	90.10	6048.53	-125.21	-92.85	-92.85	50.23
35	6056	30.70	90.00	6050.26	-125.21	-91.85	-91.85	60.05
36	6058	31.70	89.70	6051.97	-125.20	-90.81	-90.81	50.60
37	6060	32.80	89.80	6053.66	-125.20	-89.75	-89.75	55.06
38	6062	34.00	89.60	6055.33	-125.19	-88.64	-88.64	60.25
39	6064	35.00	89.20	6056.98	-125.18	-87.51	-87.51	51.27
40	6066	36.30	89.10	6058.61	-125.16	-86.35	-86.35	65.07
41	6068	37.20	88.80	6060.21	-125.14	-85.15	-85.15	45.89
42	6070	38.30	88.70	6061.79	-125.12	-83.93	-83.93	55.09
43	6072	39.40	88.40	6063.35	-125.08	-82.67	-82.67	55.80
44	6074	40.50	88.20	6064.88	-125.05	-81.39	-81.39	55.37
45	6076	41.50	88.00	6066.39	-125.00	-80.08	-80.08	50.43
46	6078	42.60	87.80	6067.87	-124.95	-78.74	-78.74	55.41
47	6080	43.70	87.60	6069.33	-124.90	-77.37	-77.37	55.42
48	6085	47.30	87.60	6072.84	-124.75	-73.81	-73.81	72.00
49	6090	50.20	87.20	6076.13	-124.58	-70.05	-70.05	58.31
50	6095	53.40	87.20	6079.23	-124.39	-66.13	-66.13	64.00
51	6100	57.20	87.10	6082.07	-124.18	-62.02	-62.02	76.02
52	6105	61.50	87.30	6084.62	-123.97	-57.73	-57.73	86.07
53	6110	66.50	87.20	6086.81	-123.76	-53.24	-53.24	100.02
54	6115	71.50	84.80	6088.60	-123.43	-48.59	-48.59	109.57
55	6120	76.80	84.40	6089.97	-122.98	-43.80	-43.80	106.28
56	6125	81.10	83.50	6090.93	-122.46	-38.92	-38.92	87.79
57	6130	84.20	83.10	6091.57	-121.88	-34.00	-34.00	62.51
58	6135	85.80	82.50	6092.00	-121.26	-29.06	-29.06	34.16
59	6140	86.50	82.90	6092.34	-120.62	-24.11	-24.11	16.12
60	6145	86.60	82.80	6092.64	-120.00	-19.16	-19.16	2.83
61	6150	86.70	82.60	6092.93	-119.37	-14.20	-14.20	4.47

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SUR			TRUE					DLS/
NUM	MD	INC	AZM	TVD	N-S	E-W	SECT	100
62	6155	86.90	82.60	6093.21	-118.72	-9.25	-9.25	4.00
63	6160	87.10	82.70	6093.47	-118.08	-4.30	-4.30	4.47
64	6165	87.40	82.70	6093.71	-117.45	0.65	0.65	6.00
65	6170	87.60	82.80	6093.93	-116.82	5.61	5.61	4.47
66	6200	88.20	84.40	6095.03	-113.48	35.40	35.40	5.69
67	6231	89.40	85.80	6095.68	-110.83	66.28	66.28	5.95
68	6263	88.00	85.90	6096.40	-108.52	98.18	98.18	4.39
69	6294	86.50	86.00	6097.89	-106.33	129.07	129.07	4.85
70	6326	85.60	85.80	6100.09	-104.05	160.91	160.91	2.88
71	6358	84.60	86.30	6102.83	-101.85	192.72	192.72	3.49
72	6389	84.60	86.10	6105.75	-99.80	223.51	223.51	0.64
73	6420	84.30	87.10	6108.74	-97.98	254.31	254.31	3.35
74	6452	85.00	87.30	6111.73	-96.42	286.14	286.14	2.27
75	6483	86.10	87.50	6114.13	-95.02	317.01	317.01	3.61
76	6515	87.50	87.80	6115.92	-93.71	348.93	348.93	4.47
77	6545	87.90	87.90	6117.12	-92.58	378.89	378.89	1.37
78	6577	87.40	85.80	6118.43	-90.83	410.81	410.81	6.74
79	6606	86.80	87.10	6119.90	-89.03	439.72	439.72	4.93
80	6635	86.70	87.60	6121.55	-87.69	468.64	468.64	1.76
81	6665	87.10	88.10	6123.17	-86.57	498.57	498.57	2.13
82	6696	88.70	88.90	6124.30	-85.76	529.54	529.54	5.77
83	6727	89.30	89.00	6124.85	-85.19	560.53	560.53	1.96
84	6759	89.20	88.20	6125.26	-84.41	592.52	592.52	2.52
85	6789	88.80	87.80	6125.79	-83.36	622.50	622.50	1.89
86	6821	87.60	88.60	6126.79	-82.36	654.46	654.46	4.51
87	6852	87.50	87.80	6128.12	-81.38	685.42	685.42	2.60
88	6882	87.30	88.20	6129.48	-80.34	715.37	715.37	1.49
89	6913	86.80	89.20	6131.07	-79.64	746.32	746.32	3.60
90	6945	87.10	88.90	6132.78	-79.11	778.27	778.27	1.32
91	6974	87.60	89.10	6134.12	-78.60	807.24	807.24	1.86
92	7005	88.00	88.90	6135.31	-78.06	838.21	838.21	1.44

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90.00

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NUM	MD	INC	AZM	TVD	N-S	E-W	SECT	100
93	7037	88.60	89.60	6136.26	-77.64	870.19	870.19	2.88
94	7068	89.40	88.70	6136.80	-77.18	901.18	901.18	3.88
95	7098	89.80	88.40	6137.01	-76.42	931.17	931.17	1.67
96	7130	89.20	88.70	6137.29	-75.61	963.16	963.16	2.10
97	7162	89.90	87.70	6137.54	-74.61	995.14	995.14	3.81
98	7192	89.00	86.90	6137.83	-73.19	1025.11	1025.11	4.01
99	7224	88.60	87.00	6138.50	-71.49	1057.06	1057.06	1.29
100	7262	88.90	90.10	6139.33	-70.53	1095.03	1095.03	8.19
101	7292	88.90	91.20	6139.90	-70.87	1125.02	1125.02	3.67
102	7322	89.90	91.40	6140.22	-71.55	1155.01	1155.01	3.40
103	7353	90.40	91.10	6140.13	-72.23	1186.00	1186.00	1.88
104	7385	90.70	90.90	6139.83	-72.79	1218.00	1218.00	1.13
105	7417	90.20	89.50	6139.58	-72.90	1250.00	1250.00	4.65
106	7446	89.90	89.90	6139.55	-72.75	1279.00	1279.00	1.72
107	7478	90.00	90.20	6139.58	-72.77	1310.99	1310.99	0.99
108	7509	89.70	90.40	6139.66	-72.94	1341.99	1341.99	1.16
109	7540	89.80	91.40	6139.80	-73.42	1372.99	1372.99	3.24
110	7572	88.90	91.60	6140.16	-74.26	1404.98	1404.98	2.88
111	7604	86.80	91.40	6141.36	-75.10	1436.94	1436.94	6.59
112	7635	86.00	91.50	6143.31	-75.88	1467.87	1467.87	2.60
113	7665	84.70	91.00	6145.74	-76.53	1497.76	1497.76	4.64
114	7700	84.50	90.20	6149.03	-76.90	1532.61	1532.61	2.35
115	7732	87.10	90.10	6151.37	-76.98	1564.52	1564.52	8.13
116	7762	88.50	89.80	6152.53	-76.96	1594.49	1594.49	4.77
117	7792	88.20	89.50	6153.39	-76.77	1624.48	1624.48	1.41
118	7823	86.40	89.90	6154.85	-76.61	1655.44	1655.44	5.95
119	7852	86.40	90.10	6156.67	-76.61	1684.39	1684.39	0.69
120	7884	86.50	90.20	6158.65	-76.69	1716.33	1716.33	0.44
121	7914	87.40	89.90	6160.25	-76.72	1746.28	1746.28	3.16
122	7945	87.90	90.00	6161.52	-76.69	1777.26	1777.26	1.64
123	7974	88.70	90.30	6162.38	-76.77	1806.24	1806.24	2.95

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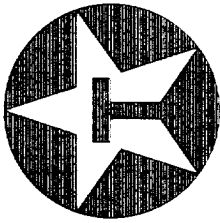
PROPOSED DIR.

90.00

SUR NUM	MD	INC	TRUE AZM	TVD	N-S	E-W	SECT	DLS/ 100
124	8005	88.10	90.80	6163.25	-77.07	1837.23	1837.23	2.52
125	8037	87.60	90.70	6164.45	-77.49	1869.20	1869.20	1.59
126	8066	87.80	91.20	6165.61	-77.97	1898.18	1898.18	1.86
127	8079	87.90	91.50	6166.10	-78.27	1911.16	1911.16	2.43
128	8111	87.70	90.00	6167.33	-78.69	1943.14	1943.14	4.73
129	8141	87.60	88.90	6168.56	-78.40	1973.11	1973.11	3.68
130	8174	86.40	88.00	6170.28	-77.51	2006.05	2006.05	4.54
131	8206	86.60	87.00	6172.24	-76.12	2037.96	2037.96	3.18
132	8236	86.90	86.30	6173.94	-74.37	2067.86	2067.86	2.54
133	8266	86.90	85.80	6175.56	-72.30	2097.75	2097.75	1.66
134	8298	87.00	85.50	6177.26	-69.88	2129.61	2129.61	0.99
135	8330	88.30	86.60	6178.58	-67.68	2161.51	2161.51	5.32
136	8361	88.00	86.60	6179.58	-65.84	2192.43	2192.43	0.97
137	8392	89.20	86.60	6180.33	-64.00	2223.37	2223.37	3.87
138	8423	89.20	87.30	6180.77	-62.35	2254.32	2254.32	2.26
139	8452	90.30	87.50	6180.89	-61.04	2283.29	2283.29	3.86
140	8481	90.40	88.40	6180.72	-60.00	2312.27	2312.27	3.12
141	8512	89.60	87.50	6180.72	-58.89	2343.25	2343.25	3.88
142	8544	88.60	87.20	6181.22	-57.41	2375.21	2375.21	3.26
143	8574	87.60	87.30	6182.21	-55.97	2405.16	2405.16	3.35
144	8604	87.10	86.20	6183.60	-54.28	2435.08	2435.08	4.02
145	8635	86.70	86.60	6185.28	-52.33	2465.98	2465.98	1.82
146	8670	86.70	86.60	6187.29	-50.26	2500.86	2500.86	0.00

Survey No. 0 is a gyro run by Scientific Drilling
 1 thru 145 is an all angle tensor steering tool
 Steering tool surveys ran by Becfield Drlg. Services
 Survey No. 146 is a projection to total depth.
 Bottom Hole location from Surface Location.
 Horizontal Displacement = 2501.36 feet
 Displacement Bearing = South 1.15 East (True)

BECHFIELD DRILLING SERVICES



TEXACO INC.

JICARILLA "C" NO. 35
RIO ARriba COUNTY, NM

Drawn By: RER

Date: 12/20/95

HORIZONTAL
PROJECTION

This surface location
has been determined
by the coordinates 0.0

Large area and depth
are indicated by
the surface location.

Corrected By: BMS



Magnetic Dec: 112° E

