



13444 Almeda School Road
Houston, Texas 77047
Office: (713) 433-2500
Fax: (713) 433-2566

PERFORMANCE CERTIFICATION

TRC Operator No. 676028

Mr. Ron Brooks
ENERGY DEVELOPMENT CORPORATION
1000 Louisiana
Suite 2900
Houston, TX 77002

Re: Directional Survey Filing and Certification
Original 1 of 4

For: Energy Development Corporation
San Isidro 12 11
Sandoval County, New Mexico
API No. 30-043-20895

RECEIVED
MAY 16 1994

OIL CON. DIV.
DIST. 3

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MAY - 9 1994

OIL CON. DIV.
DIST. 3

I, William W. Bland, II, Operations Coordinator of Precision Radius, Inc., having personal knowledge of all the facts, certify the Tensor all-angle continuous readout steering tool survey records obtained on November 10 through December 10, 1993, from a depth of 3818 feet measured to a depth of 5502 feet measured with bottom hole coordinates from surface location of 4188.2 True Vertical Depth, total North 1490.8 feet, total West 433.3 feet, with 1552.1 feet closure displacement at a bearing of North 16.3 degrees West (True), to be accurate and correct to the best of my knowledge.

Sincerely,

RADIUS, INC.

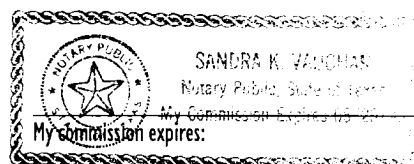
William W. Bland, II
Operations Coordinator

WWB/ms

THE STATE OF TEXAS §
COUNTY OF HARRIS §

This instrument was acknowledged before me on March 31, 1994, by William W. Bland, II, Operations Coordinator of Radius, Inc., a Texas corporation, on behalf of said corporation, in the capacity therein stated.

Sandra K. Vaughan
NOTARY PUBLIC, STATE OF TEXAS



RADIUS, INC.
Directional Survey Report
Version 2.4

Company: Energy Development Corporation
Well: SAN ISIDRO 12-11
Location: Cuba, New
Field: SANDOVAL COUNTY
Operator: jeff,tracy,mike,greg
Job No.: 3PCSTG090

Survey File -> 3090C
(Tie In)
Probe 2189
Depth Units: Feet
Dec: 11.3

VS Azimuth = 345.0
VS Origin North = 0.0
VS Origin East = 0.0

Method: Minimum Curvature

Station	MD	Inc	Az	North	East	TVD	VS	DL	DS
0	3797.0	16.1	339.0	47.0	9.0	3790.0	43.0	0.0	TI
1	3818.0	15.6	334.4	52.3	6.7	3810.2	48.7	6.5	ST
2	3850.0	16.2	311.8	59.1	1.5	3841.0	56.7	19.3	ST
3	3882.0	19.8	293.1	64.2	-6.8	3871.5	63.8	21.3	ST
4	3913.0	24.3	299.3	69.4	-17.2	3900.2	71.5	16.2	ST
5	3945.0	28.6	309.9	77.6	-28.8	3928.8	82.4	20.0	ST
6	3976.0	32.6	320.5	88.8	-39.8	3955.5	96.1	21.6	ST
7	4007.0	35.6	330.4	103.1	-49.6	3981.2	112.4	20.3	ST
8	4039.0	40.6	333.8	120.5	-58.8	4006.4	131.7	17.1	ST
9	4070.0	46.3	333.3	139.6	-68.3	4028.9	152.5	18.5	ST
10	4101.0	51.8	337.2	160.9	-78.1	4049.2	175.6	20.1	ST
11	4132.0	57.2	336.7	184.1	-88.0	4067.2	200.6	17.5	ST
12	4165.0	63.0	334.9	210.2	-99.7	4083.6	228.8	18.1	ST
13	4196.0	68.0	339.1	236.2	-110.7	4096.5	256.8	20.4	ST
14	4227.0	73.1	344.0	263.9	-119.9	4106.8	285.9	22.1	ST
15	4259.0	77.6	346.3	293.8	-127.8	4114.9	316.9	15.5	ST
16	4290.0	81.9	348.1	323.5	-134.6	4120.4	347.3	15.2	ST
17	4321.0	86.2	348.4	353.7	-140.9	4123.6	378.1	13.7	ST
18	4353.0	88.0	349.2	385.1	-147.1	4125.3	410.0	6.2	ST
19	4384.0	89.6	349.4	415.5	-152.8	4125.9	440.9	5.3	ST

RADIUS, INC.
Directional Survey Report
Version 2.4

Company: Energy Development Corporation
Well: SAN ISIDRO 12-11
Location: Cuba, New
Field: SANDOVAL COUNTY
Operator: jeff,tracy,mike,greg
Job No.: 3PCSTG090

Survey File -> 3090C
(Tie In)
Probe 2189
Depth Units: Feet
Dec: 11.3

VS Azimuth = 345.0
VS Origin North = 0.0
VS Origin East = 0.0
Method: Minimum Curvature

Station	MD	Inc	Az	North	East	TVD	VS	DL	DS
20	4416.0	90.5	349.7	447.0	-158.6	4125.9	472.8	3.1	ST
21	4447.0	91.0	349.8	477.5	-164.1	4125.4	503.7	1.6	ST
22	4478.0	89.1	349.4	508.0	-169.7	4125.4	534.6	6.3	ST
23	4510.0	88.2	348.1	539.3	-176.0	4126.1	566.5	4.8	ST
24	4541.0	88.4	349.3	569.7	-182.0	4127.1	597.4	3.7	ST
25	4571.0	88.6	348.9	599.2	-187.7	4127.9	627.3	1.4	ST
26	4602.0	89.0	350.2	629.7	-193.3	4128.5	658.2	4.2	ST
27	4632.0	87.5	349.1	659.2	-198.7	4129.4	688.1	6.2	ST
28	4663.0	87.5	349.4	689.6	-204.5	4130.8	719.0	0.9	ST
29	4694.0	87.9	349.8	720.0	-210.1	4132.1	749.9	1.7	ST
30	4726.0	88.5	350.0	751.5	-215.7	4133.1	781.8	2.2	ST
31	4757.0	88.7	348.9	782.0	-221.4	4133.8	812.7	3.5	ST
32	4789.0	89.3	349.0	813.4	-227.5	4134.4	844.6	1.8	ST
33	4821.0	88.2	347.7	844.7	-233.9	4135.1	876.5	5.4	ST
34	4851.0	87.7	344.6	873.8	-241.1	4136.2	906.5	10.5	ST
35	4881.0	88.4	345.4	902.8	-248.9	4137.2	936.5	3.5	ST
36	4913.0	88.0	345.9	933.8	-256.8	4138.3	968.4	2.1	ST
37	4944.0	85.2	344.5	963.7	-264.7	4140.1	999.4	10.2	ST
38	4975.0	85.1	344.6	993.5	-272.9	4142.8	1030.3	0.6	ST

RADIUS, INC.
Directional Survey Report
Version 2.4

Company: Energy Development Corporation
Well: SAN ISIDRO 12-11
Location: Cuba, New
Field: SANDOVAL COUNTY
Operator: jeff,tracy,mike,greg
Job No.: 3PCSTG090

Survey File -> 3090C
(Tie In)
Probe 2189
Depth Units: Feet
Dec: 11.3

VS Azimuth = 345.0 Method: Minimum Curvature
VS Origin North = 0.0
VS Origin East = 0.0

Station	MD	Inc	Az	North	East	TVD	VS	DL	DS
39	5006.0	85.4	343.3	1023.2	-281.5	4145.3	1061.2	4.4	ST
40	5038.0	86.8	343.6	1053.8	-290.6	4147.5	1093.1	4.3	ST
41	5069.0	86.9	343.4	1083.5	-299.3	4149.2	1124.0	0.8	ST
42	5101.0	86.8	343.4	1114.1	-308.5	4150.9	1155.9	0.6	ST
43	5132.0	86.3	343.9	1143.8	-317.2	4152.8	1186.9	2.4	ST
44	5164.0	83.3	343.2	1174.3	-326.2	4155.7	1218.7	9.5	ST
45	5194.0	79.9	343.1	1202.7	-334.8	4160.1	1248.4	11.3	ST
46	5223.0	76.8	342.3	1229.8	-343.2	4166.0	1276.8	10.9	ST
47	5254.0	74.3	342.7	1258.5	-352.2	4173.7	1306.8	8.4	ST
48	5284.0	77.0	342.6	1286.2	-360.9	4181.1	1335.8	9.3	ST
49	5316.0	81.1	342.6	1316.2	-370.3	4187.2	1367.2	12.5	ST
50	5346.0	85.8	341.7	1344.6	-379.4	4190.7	1396.9	16.1	ST
51	5376.0	89.0	340.9	1373.0	-389.0	4192.0	1426.8	11.1	ST
52	5408.0	92.1	339.1	1403.0	-399.9	4191.7	1458.7	11.2	ST
53	5440.0	91.2	339.9	1433.0	-411.1	4190.8	1490.6	3.9	ST
54	5471.0	91.8	339.2	1462.0	-421.9	4190.0	1521.4	3.0	ST
55	5502.0	94.9	337.8	1490.8	-433.3	4188.2	1552.1	10.9	ST

DISTRICT I

P.O. Box 1880, Hobbs, NM 88240

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II

P.O. Drawer 80, Artesia, NM 88210

DISTRICT III

1000 Rio Grande Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ENERGY DEVELOPMENT CORP.			Lease SAN ISIDRO 12		Well No. 11
Unit Letter K	Section 12	Township 20 NORTH	Range 3 WEST	County SANDOVAL	
Actual Footage Location of Well: 2290 feet from the SOUTH line and 2372 feet from the WEST line					
Ground Level Elev. 8928.5'	Producing Formation MANZOS		Pool RIO PUECO-MANZOS	Dedicated Acreage 640 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes☐ No

If answer is "yes" type of consolidation _____

If answer is "no" list of owners and tract descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, force-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

OPERATOR CERTIFICATION

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

Signature _____

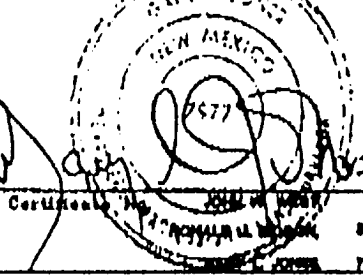
Printed Name **GENE LINTON**Position **SUPR-PROD ACCT**Company **Energy Development Corp**Date **5-12-94****SURVEYOR CERTIFICATION**

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

SEPTEMBER 14, 1983

Signature & Seal of Professional Surveyor



Certification No. **878**
 Professional Surveyor **8000**
 State of New Mexico **1977**

93-11-1741Precision Radius, Inc.
CERTIFIED BOTTOM HOLE LOCATION

Operator: Energy Development Corporation
 Well Name: San Isidro 12-11
 Total MD: 5502.0
 True Vertical Depth: 4188.2
 Total North: 1490.8
 Total West: 433.3
 Horizontal Displacement: 1552.1
 Displacement Bearing: North 16.3 West (True)
 Survey Dates: Nov 10-Dec 10, 1993

B.H.L.

8920.2' 8922.7'
 2372' 6931.3' 6937.8'

RECEIVED
MAY - 9 1994
OIL CON. DIV.
DIST. 3

0 300 600 900 1200 1500 1800 2100 2400 2700 3000 3300 3600 3900 4200 4500 4800 5100 5400 5700 6000



Radius, Inc.

Horizontal Guidance Systems

13444 Almeda School Road
Houston, Texas 77047
Office: (713) 433-2500
Fax: (713) 433-2566

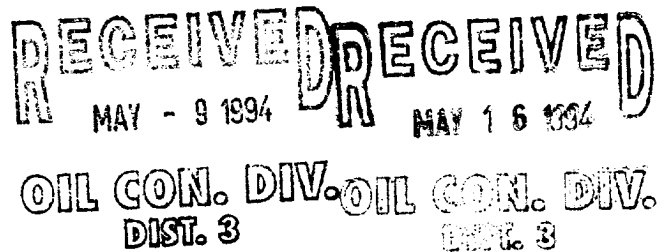
PERFORMANCE CERTIFICATION

TRC Operator No. 676028

Mr. Ron Brooks
ENERGY DEVELOPMENT CORPORATION
1000 Louisiana
Suite 2900
Houston, TX 77002

Re: Directional Survey Filing and Certification
Original 4 of 4

For: Energy Development Corporation
San Isidro 12 11
Sandoval County, New Mexico
API No. 30-043-20895



I, William W. Bland, II, Operations Coordinator of Precision Radius, Inc., having personal knowledge of all the facts, certify the Tensor all-angle continuous readout steering tool survey records obtained on November 10 through December 10, 1993, from a depth of 3818 feet measured to a depth of 5502 feet measured with bottom hole coordinates from surface location of 4188.2 True Vertical Depth, total North 1490.8 feet, total West 433.3 feet, with 1552.1 feet closure displacement at a bearing of North 16.3 degrees West (True), to be accurate and correct to the best of my knowledge.

Sincerely,

RADIUS, INC.

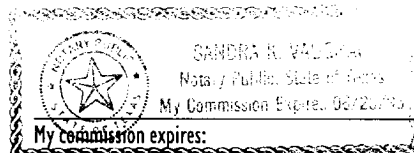
William W. Bland, II
Operations Coordinator

WWB/ms

THE STATE OF TEXAS §
COUNTY OF HARRIS §

This instrument was acknowledged before me on March 31, 1994, by William W. Bland, II, Operations Coordinator of Radius, Inc., a Texas corporation, on behalf of said corporation, in the capacity therein stated.

NOTARY PUBLIC, STATE OF TEXAS



RADIUS, INC.
Directional Survey Report
Version 2.4

Company: Energy Development Corporation
Well: SAN ISIDRO 12-11
Location: Cuba, New
Field: SANDOVAL COUNTY
Operator: jeff,tracy, mike,greg
Job No.: 3PCSTG090

Survey File -> 3090C
(Tie In)
Probe 2189
Depth Units: Feet
Dec: 11.3

VS Azimuth = 345.0
VS Origin North = 0.0
VS Origin East = 0.0

Method: Minimum Curvature

Station	MD	Inc	Az	North	East	TVD	VS	DL	DS
0	3797.0	16.1	339.0	47.0	9.0	3790.0	43.0	0.0	TI
1	3818.0	15.6	334.4	52.3	6.7	3810.2	48.7	6.5	ST
2	3850.0	16.2	311.8	59.1	1.5	3841.0	56.7	19.3	ST
3	3882.0	19.8	293.1	64.2	-6.8	3871.5	63.8	21.3	ST
4	3913.0	24.3	299.3	69.4	-17.2	3900.2	71.5	16.2	ST
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6	3976.0	32.6	320.5	88.8	-39.8	3955.5	96.1	21.6	ST
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19	4384.0	89.6	349.4	415.5	-152.8	4125.9	440.9	5.3	ST

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Directional Survey Report
Version 2.4

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Field: SANDOVAL COUNTY
Operator: jeff,tracy, mike,greg
Job No.: 3PCSTG090

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(Tie In)
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21	4447.0	91.0	349.8	477.5	-164.1	4125.4	503.7	1.6	ST
22	4478.0	89.1	349.4	508.0	-169.7	4125.4	534.6	6.3	ST
23	4510.0	88.2	348.1	539.3	-176.0	4126.1	566.5	4.8	ST
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26	4602.0	89.0	350.2	629.7	-193.3	4128.5	658.2	4.2	ST
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28	4663.0	87.5	349.4	689.6	-204.5	4130.8	719.0	0.9	ST
29	4694.0	87.9	349.8	720.0	-210.1	4132.1	749.9	1.7	ST
30	4726.0	88.5	350.0	751.5	-215.7	4133.1	781.8	2.2	ST
31	4757.0	88.7	348.9	782.0	-221.4	4133.8	812.7	3.5	ST
32	4789.0	89.3	349.0	813.4	-227.5	4134.4	844.6	1.8	ST
33	4821.0	88.2	347.7	844.7	-233.9	4135.1	876.5	5.4	ST
34	4851.0	87.7	344.6	873.8	-241.1	4136.2	906.5	10.5	ST
35	4881.0	88.4	345.4	902.8	-248.9	4137.2	936.5	3.5	ST
36	4913.0	88.0	345.9	933.8	-256.8	4138.3	968.4	2.1	ST
37	4944.0	85.2	344.5	963.7	-264.7	4140.1	999.4	10.2	ST
38	4975.0	85.1	344.6	993.5	-272.9	4142.8	1030.3	0.6	ST

RADIUS, INC.
Directional Survey Report
Version 2.4

Company: Energy Development Corporation
Well: SAN ISIDRO 12-11
Location: Cuba, New
Field: SANDOVAL COUNTY
Operator: jeff,tracy, mike,greg
Job No.: 3PCSTG090

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Depth Units: Feet
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VS Origin North = 0.0
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39	5006.0	85.4	343.3	1023.2	-281.5	4145.3	1061.2	4.4	ST
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41	5069.0	86.9	343.4	1083.5	-299.3	4149.2	1124.0	0.8	ST
42	5101.0	86.8	343.4	1114.1	-308.5	4150.9	1155.9	0.6	ST
43	5132.0	86.3	343.9	1143.8	-317.2	4152.8	1186.9	2.4	ST
44	5164.0	83.3	343.2	1174.3	-326.2	4155.7	1218.7	9.5	ST
45	5194.0	79.9	343.1	1202.7	-334.8	4160.1	1248.4	11.3	ST
46	5223.0	76.8	342.3	1229.8	-343.2	4166.0	1276.8	10.9	ST
47	5254.0	74.3	342.7	1258.5	-352.2	4173.7	1306.8	8.4	ST
48	5284.0	77.0	342.6	1286.2	-360.9	4181.1	1335.8	9.3	ST
49	5316.0	81.1	342.6	1316.2	-370.3	4187.2	1367.2	12.5	ST
50	5346.0	85.8	341.7	1344.6	-379.4	4190.7	1396.9	16.1	ST
51	5376.0	89.0	340.9	1373.0	-389.0	4192.0	1426.8	11.1	ST
52	5408.0	92.1	339.1	1403.0	-399.9	4191.7	1458.7	11.2	ST
53	5440.0	91.2	339.9	1433.0	-411.1	4190.8	1490.6	3.9	ST
54	5471.0	91.8	339.2	1462.0	-421.9	4190.0	1521.4	3.0	ST
55	5502.0	94.9	337.8	1490.8	-433.3	4188.2	1552.1	10.9	ST

DISTRICT I

P.O. Box 1880, Hobbs, NM 88240

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

DISTRICT II

P.O. Drawer 80, Artesia, NM 88210

DISTRICT III

1000 N. Briscoe Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

All Distances must be from the outer boundaries of the section

Operator ENERGY DEVELOPMENT CORP.			Lease SAN ISIDRO 12		Well No. 11
Unit Letter K	Section 12	Township 20 NORTH	Range 3 WEST	County NMPM	SANDOVAL
Actual Footage Location of Well: BHL 1500' FNL, 1739' FNL (UATF)					
2290 feet from the SOUTH line and		2372		feet from the WEST line	
Ground Level Elev. 8928.5'	Producing Formation MANCOS	Pool Rio Puerco-Mancos	Dedicated Acreage: 640 Acres		

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.

2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).

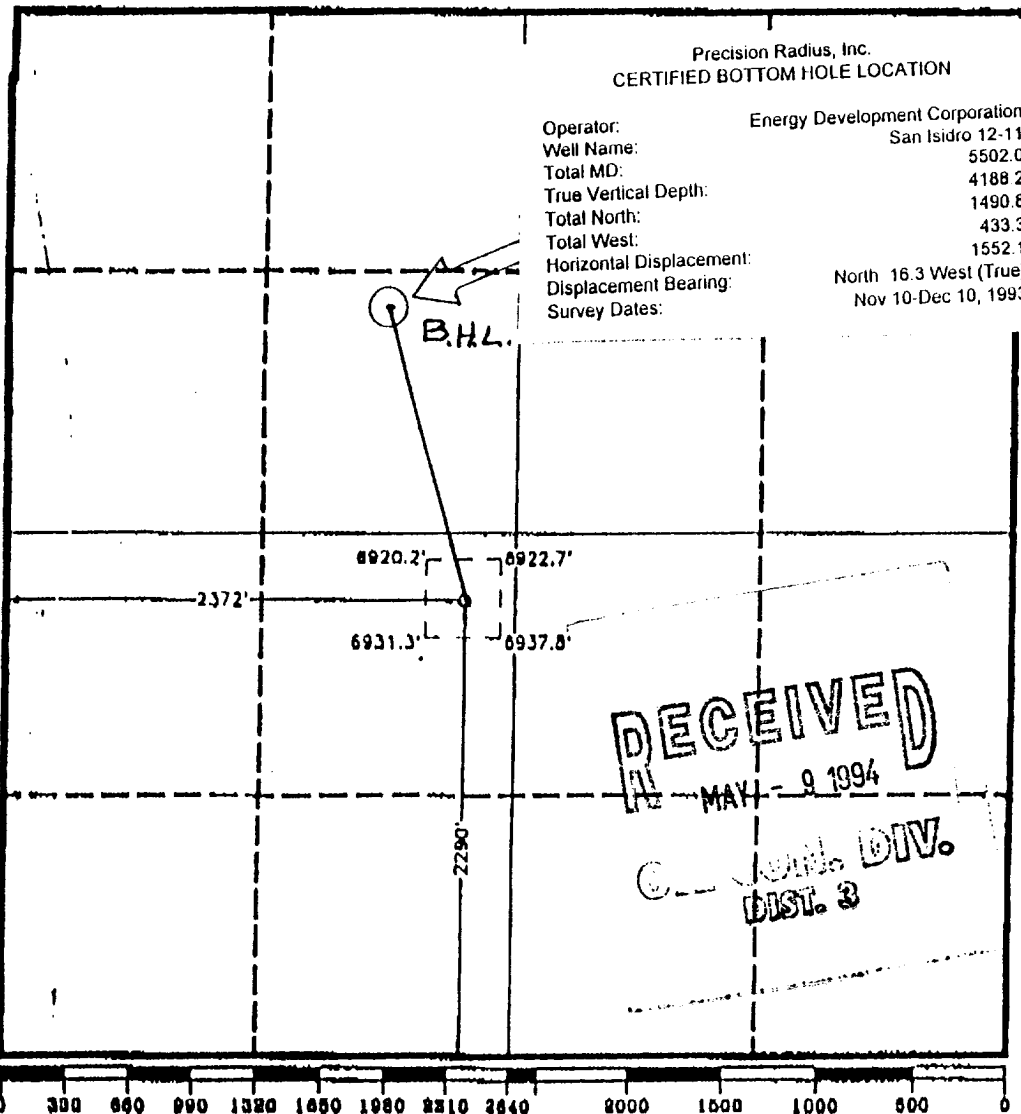
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?

☐ Yes☐ No

If answer is 'yes' type of consolidation _____

If answer is 'no' list of owners and trust descriptions which have actually been consolidated. (Use reverse side of this form necessary.)

No allowable will be assigned to the well unit all interests have been consolidated (by communitization, unitization, forced-pooling, otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.

**OPERATOR CERTIFICATION**

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

Signature

Printed Name

Position

Company

Date

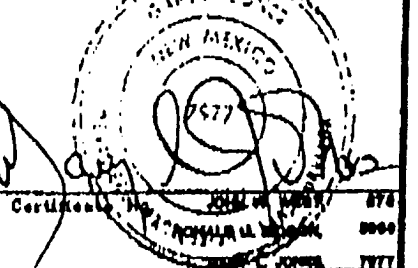
SURVEYOR CERTIFICATION

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

SEPTEMBER 14, 1993

Signature of Registered Professional Surveyor



Certified by: [Signature]
Date: [Signature]
[Signature]

93-11-1741