REPORT OF

SUB-SURFACE DIRECTIONAL SURVEY

OIL CON. DIV.



REPORT of SUB-SURFACE DIRECTIONAL SURVEY

DEKA EXPLORATION, INC.

COMPANY

QUINLAN RANCH #1

WELL NAME

RIO ARRIBA COUNTY, NEW MEXICO

LOCATION

JOB NUMBER

TYPE OF SURVEY
SINGLE SHOT

<u>DATE</u> 7-16-92

SURVEY BY
DERRIL GLEIM

OFFICE 410-RMT

SURVEY CERTIFICATION SHEET

Company Deka Exploration, IncJob # N/A Date July 16, 1992

Lease Quinlan Ranch We	ell# <u> </u>	StateN	ew Mexico						
Surveyed from a depth of 167	feet to a	depth of_	2,450 feet.						
Type of Survey Single Shot									
Directional Supervisor/Surveyor Derril Gleim									
The data and calculations for this survey have been checked by me and conform to the standards and procedures set forth by Eastman Teleco Company. This report represents a true and correct Directional Survey of this well based on the original data obtained at the well site.									
Checked by:									
	District Ori	lling Eng	gineer						
This document has been subscribed and affirmed, or sworn to before me in the county of Denver, state of Colorado, this <u>27th</u> day of <u>Oatabes</u> , 19 <u>92</u> .									
Jayre a. Vakes	Mycommission	expires ₍	Jug. 4, 1996						

DEKA EXPLORATION INC. QUILNLAN RANCH #1

QUINLAND RANCH #1 slot #1 WILDCAT RIO ARRIBA, NEW MEXICO

SURVEY LISTING

Your ref : 0ur ref : svy2568
Other ref :

Date printed : 26-Oct-92 Date created : 16-Jul-92 Last revised : 26-Oct-92

Field is centred on 0.000,0.000,999.00000,+ Structure is centred on 0.000,0.000,999.00000,+

DEKA EXPLORATION INC. QUILNLAN RANCH #1,QUINLAND RANCH #1 WILDCAT,RIO ARRIBA, NEW MEXICO

SURVEY LISTING Page 1 Your ref: Last revised: 26-Oct-92

Measured Depth		Azimuth Degrees	True Vert. Depth	RECTAN COORDI			Vert Sect			
0.00	0.00	0.00	0.00	0.00 N	0.00 E	0.00	0.00			
167.00	0.25	103.00	167.00	0.08 s	0.35 E	0.15	0.36			
828.00	1.00	103.00	827.96	1.70 S	7.38 E	0.11	7.57			
1148.00	1.25	103.00	1147.89	3.12 S	13.50 E	0.08	13.86			
1488.00	1.25	103.00	1487.81	4.78 S	20.73 E	0.00	21.27			
1788.00	2.25	103.00	1787.67	6.85 S	29.66 E	0.33	30.44			
2450.00	2.25	103.00	2449.16	12.69 S	54.98 E	0.00	56.42	EXTRAPOLATION-NOT	AN ACTUAL	SURVEY

DEKA EXPLORATION INC. QUILNLAN RANCH #1,QUINLAND RANCH #1 WILDCAT,RIO ARRIBA, NEW MEXICO

SURVEY LISTING Page 2
Your ref:
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Comments in wellpath

MD TVD Rectangular Coords. Comment

2450.00 2449.16 12.69 S 54.98 E EXTRAPOLATION-NOT AN ACTUAL SURVEY

All data is in feet unless otherwise stated
Coordinates are from slot #1 and TVDs are from wellhead.
Slot coordinates are 0.00 N 0.00 E.
Bottom hole distance is 56.42 on azimuth 103.00 degrees from wellhead.
Vertical section is from wellhead on azimuth 103.00 degrees.
Calculation uses the minimum curvature method.

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