

Century

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+

RESISTANCE

THICKNESS

LOGGING DATA



PROBE SIZE: 1-3/8"	CALIBRATION: 300																																																																																					
DATE: 3-13-58	FIELD HDQTRS: Grants																																																																																					
<table><tr><td>INITIAL RUN</td><td>RE. RUN</td><td>RE. RUN</td><td>RE. RUN</td><td>RE. RUN</td></tr><tr><td>HOLE NO.</td><td>C-2</td><td></td><td></td><td></td></tr><tr><td>HOLE DIA.</td><td>IN</td><td></td><td></td><td></td></tr><tr><td>DRILLED DEPTH</td><td>250 FT</td><td></td><td></td><td></td></tr><tr><td>LOGGED DEPTH</td><td>235 FT</td><td></td><td></td><td></td></tr><tr><td>GAMMA SCALE</td><td>- CPS</td><td></td><td></td><td></td></tr><tr><td>TIME CONSTANT</td><td>- SEC</td><td></td><td></td><td></td></tr><tr><td>PAPER SPEED</td><td>10 FT/IN</td><td></td><td></td><td></td></tr><tr><td>LOGGING SPEED</td><td>10 FT/M</td><td>FT/M</td><td>FT/M</td><td>FT/M</td></tr><tr><td>RESISTANCE SCALE</td><td>100 ohm</td><td></td><td></td><td></td></tr><tr><td>SELF POT SCALE</td><td>10 MV/IN</td><td></td><td>SELF POT T.D.</td><td></td></tr><tr><td>BORE HOLE MEDIUM</td><td>water</td><td></td><td>WITH</td><td></td></tr><tr><td>MUD READINGS</td><td>RESISTIVITY</td><td></td><td>TYPE BASE</td><td></td></tr><tr><td></td><td>VISCOSITY</td><td></td><td>SALINITY</td><td></td></tr><tr><td>CALIPER SCALE</td><td>WEIGHT</td><td>LEG LBS/GAL</td><td>PAPER SCALE</td><td></td></tr><tr><td>TIME IN</td><td>0130</td><td>CASED TO</td><td>I. D.</td><td>IN</td></tr><tr><td>TIME OUT</td><td>0200</td><td>CORE INT.</td><td>DIAM</td><td>IN</td></tr></table>		INITIAL RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN	HOLE NO.	C-2				HOLE DIA.	IN				DRILLED DEPTH	250 FT				LOGGED DEPTH	235 FT				GAMMA SCALE	- CPS				TIME CONSTANT	- SEC				PAPER SPEED	10 FT/IN				LOGGING SPEED	10 FT/M	FT/M	FT/M	FT/M	RESISTANCE SCALE	100 ohm				SELF POT SCALE	10 MV/IN		SELF POT T.D.		BORE HOLE MEDIUM	water		WITH		MUD READINGS	RESISTIVITY		TYPE BASE			VISCOSITY		SALINITY		CALIPER SCALE	WEIGHT	LEG LBS/GAL	PAPER SCALE		TIME IN	0130	CASED TO	I. D.	IN	TIME OUT	0200	CORE INT.	DIAM	IN
INITIAL RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN																																																																																		
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LOCATION	TIME																																																																																					
SEC. 20 TWP. 20 RGE. 9	OFFICE: DRIVE:																																																																																					
COUNTY: McKinley	STANDBY: 7.0																																																																																					
STATE: New Mexico	FIELD: 0.5																																																																																					
AREA:	TOTAL: 7.5																																																																																					
CLIENT: CHACO OIL	BREAKDOWN:																																																																																					
Dr. Contractor	OPERATOR:																																																																																					
Log Received and Approved By	Griffin																																																																																					
H S Birdseye	PARTY NO: U-5																																																																																					

GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY: CHACO OIL CO.	BORE HOLE NO. C-2
FIELD Red Mountain	COUNTY McKinley
LOCATION: SEC. 20 TWP. 20N RGE. 9W	
LOG. MEAS. FROM	FILE NO.
DRUG. MEAS. FROM	
DATE:	
FOOTAGE	LOCATION OF HOLE
TOTAL DEPTH (DR)	+
HOLE DIAM.	+
LOGGING SPEED	
TIME CONSTANT	
MUD TYPE	ELEVATION KB
CASED TO	GL 6377
REMARKS: No Gamma Log	BKRD. COUNT SLUSH PIT CT.

MINERALIZATION OR

DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K	CORR. CPS.	% U3O8
Reading	Depth	Drift	Mag. Ring	True Reading

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

CALIPER

+

LOGGING DATA

COPY



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.

EXPLORATION LOG

PROBE SIZE: 2"

CALIBRATION: 300

DATE: 3-13-58

FIELD HDQTRS: Grants

HOLE NO. B-3

INITIAL RUN RE. RUN RE. RUN RE. RUN RE. RUN

HOLE DIA. 4 1/2 IN

DRILLED DEPTH 250 FT

LOGGED DEPTH 228 FT

GAMMA SCALE 25 CPS

TIME CONSTANT 8 SEC

PAPER SPEED 10 FT/IN

LOGGING SPEED 10 FT/M

RESISTANCE SCALE 100 ohm

SELF POT SCALE 10 mV/IN

BORE HOLE MEDIUM Water

MUD RESISTIVITY

READINGS VISCOSITY

CALIPER SCALE WEIGHT

TIME IN 0600

TIME OUT 0630

LOCATION

OFFICE:

SEC. 20 TWP. 20 RGE. 9N

COUNTY: McKinley

STATE: N. M.

AREA:

CLIENT: CHACO OIL

Dr. Contractor

Log Received and

Approved By

H S Birdseye

SELF POTENTIAL

10 mV

+

NATURAL GAMMA RAY
COUNTS PER SECOND

COMPANY: CHACO OIL

BORE HOLE NO. B-3

FIELD Red Mountain

COUNTY McKinley, N.M.

LOCATION: SEC. 20 TWP. 20N RGE. 9W

LOG. MEAS. FROM

DRLG. MEAS. FROM

DATE:

FOOTAGE

TOTAL DEPTH (DR)

HOLE DIAM.

LOGGING SPEED

TIME CONSTANT

MUD TYPE

CASED TO

REMARKS:

LOCATION OF HOLE

+

+

ELEVATION

KB 6416

BKGRD. COUNT

SLUSH PIT CT.

MINERALIZATION OR

DIRECTIONAL DRIFT METER

COUNTS PER SEC. BED THICKNESS K CORR. CPS. % U3O8

Radius Depth Drift Mag. Bndg True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION DEPTHS THICKNESS

CALIPER

RESISTANCE
OHMS

GEOPHYSICAL CORP. TULSA, OKLA., U.S.A.					
EXPLORATION LOG					
COMPANY: CHACO OIL					
BORE HOLE NO. A-2					
FIELD <u>Red Mountain</u>					
COUNTY <u>McKinley</u>					
LOCATION: SEC. 29 TWP. 20N RGE. 9W					
LOG. MEAS. FROM DRLG. MEAS. FROM	FILE NO.				
DATE:	LOCATION OF HOLE				
FOOTAGE	<table border="1"> <tr> <td>+</td> <td>+</td> </tr> <tr> <td>+</td> <td>+</td> </tr> </table>	+	+	+	+
+	+				
+	+				
TOTAL DEPTH (DR)					
HOLE DIAM.					
LOGGING SPEED					
TIME CONSTANT					
MUD TYPE	ELEVATION KB				
CASD TO	GL <u>6406</u>				
	BKGRD. COUNT				
	SLUSH PIT CT.				
REMARKS: <u>No Gamma Log</u>					

[illegible]

CALIPER

RESISTANCE

LOGGING DATA

PROBE SIZE: 2"	CALIBRATION: 300					
DATE: 3-13-58	FIELD HQDQrs: Grants					
HOLE NO. A-0	INITIAL RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN
HOLE DIA. 4 1/2 IN						
DRILLED DEPTH 250 FT						
LOGGED DEPTH 258 FT						
GAMMA SCALE -	CPS					
TIRE CONSTANT -	SEC					
PAPER SPEED 10 FT/IN						
LOGGING SPEED 10 FT/M	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE 100 ohm						
SELF POT SCALE 10 mV/IN						
BORE HOLE MEDIUM water	WITH					
MUD READINGS	RESISTIVITY					
	VISCOSITY					
	WEIGHT	INCH	LEG. SIZE	PAPER SCALE		
CALIPER SCALE						
TIME IN 1700	CASED TO					
TIME OUT 1730	CORE INT.					
LOCATION	TIME					
SEC. TWP. RGE.	OFFICE:					
COUNTY: McKinley	DRIVE:					
STATE N. M.	STANDBY: 3.5					
AREA:	FIELD: 0.5					
CLIENT: CHACO OIL	TOTAL: 4.0					
Dr. Contractor	BREAKDOWN:					
Log Received and Approved By	OPERATOR:					
	Griffin					
H S Birdseye	PARTY NO: U-5					



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY: CHACO OIL	BORE HOLE NO. A-0
FIELD Red Mountain	
COUNTY McKinley	
LOCATION: SEC. 29 TWP. 20N RGE. 9W	
LOG. MEAS. FROM	FILE NO.
DRG. MEAS. FROM	
DATE:	LOCATION OF HOLE
FOOTAGE	
TOTAL DEPTH (DR)	
HOLE DIAM.	
LOGGING SPEED	
TIME CONSTANT	
MUD TYPE	
CASED TO	
REMARKS: No Gamma Log	

MINERALIZATION OR
DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K	KD	CORR. CPS.	% U3O8
Reading	Depth	Drift	Mag. Ind.	True Reading	

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

CALIPER

SELF POTENTIAL

10 mV

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE

LOGGING DATA



PROBE SIZE: 2" CALIBRATION: 300

DATE: 3-13-58 FIELD HDQTRS: Grants

GEOPHYSICAL CORP.

TULSA, OKLA., U.S.A.

EXPLORATION LOG

COMPANY: CHACO OIL CO.

BORE HOLE NO. A-1

FIELD Red Mountain

COUNTY McKinley, N.M.

LOCATION: SEC. 29 TWP. 20N RGE. 9W

LOG. MEAS. FROM FILE NO. LOCATION OF HOLE

DATE:

FOOTAGE

TOTAL DEPTH (DR)

HOLE DIAM.

LOGGING SPEED

TIME CONSTANT

MUD TYPE

CASED TO

REMARKS:

MINERALIZATION OR

DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K KD	CORR. CPS.	% USOs
Reading	Depth	Drift	Mag. Bias	True Reading

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION DEPTHS THICKNESS

LOCATION		TIME	
SEC. 29 TWP. 20N RGE. 9W		OFFICE:	
COUNTY: McKinley		DRIVE:	
STATE: N. M.		STANDBY: 3.5	
AREA:		FIELD: 0.5	
CLIENT: CHACO OIL		TOTAL: 4.0	
Dr. Contractor		BREAKDOWN:	
Log Received and		OPERATOR:	
Approved By		Griffin	
H S Birdseye		PARTY NO: U-5	

SELF POTENTIAL

CALIPER

LOGGING DATA



PROBE SIZE: 1-3/8" CALIBRATION: 300

DATE: 10-2-57 FIELD HDQTRS: Grants

HOLE NO.	20-16	INITIAL RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN
HOLE DIA.	4 1/2	IN					
DRILLED DEPTH	2	FT					
LOGGED DEPTH	100	FT					
GAMMA SCALE	25	CPS					
TIME CONSTANT	8	SEC					
PAPER SPEED	10	FT/IN					
LOGGING SPEED	10	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	--						
SELF POT SCALE	--	mv/in					
BORE HOLE MEDIUM	dry		WITH				
MUD			RESISTIVITY			TYPE BASE	
READINGS			VISCOSITY			SALINITY	
CALIPER SCALE		WEIGHT	LBS/GAL			PAPER SCALE	
TIME IN	1645	INCH	LEG SIZE				
TIME OUT	1700	CASED TO	CORE INT.			I.D. IN	IN
LOCATION		TIME					
SEC. TWP. RGE.		OFFICE:					
COUNTY: McKinley		DRIVE:	0.1				
STATE: New Mex.		STANDBY:	1.5				
AREA:		FIELD:	0.3				
CLIENT: CHACO OIL		TOTAL:	1.9				
D. Contractor		BREAKDOWN:					
Log Received and		OPERATOR:					
Approved By							
H S Birdseye		Mash & Meek					
		PARTY NO: U-1					

GEOPHYSICAL CORP.

TULSA, OKLA., U.S.A.

EXPLORATION LOG

COMPANY: CHACO OIL

BORE HOLE NO. 20-16

FIELD Red Mountain

COUNTY McKinley, N. M.

LOCATION: SEC. 20 TWP. 20N RGE. 9W

LOG. MEAS. FROM FILE NO.

DATE:

FOOTAGE

TOTAL DEPTH (DR)

HOLE DIAM.

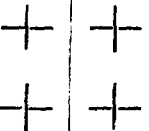
LOGGING SPEED

TIME CONSTANT

MUD TYPE

CASED TO

LOCATION OF HOLE



ELEVATION

KB

GL 6414

BKGD. COUNT SLUSH PIT CT.

REMARKS:

MINERALIZATION OR

DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K	KD	CORR. CPS.	% U3O8
Reading	Depth	Drift		Mag. Ring	True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

CALIPER

NATURAL GAMMA RAY

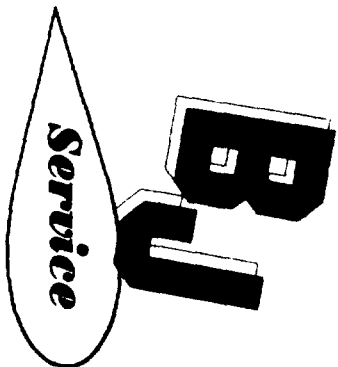
COUNTS PER SECOND

RESISTANCE

A SUBSIDIARY OF BORG-WARNER CORP.

Simultaneous

Nuclear Log

[illegible]

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



MICROLOGGING®

COUNTY McKINLEY, N.M.
 FIELD or WILDCAT
 LOCATION 20-1 SANTA FE
 WELL PACIFIC
 COMPANY CHACO OIL COMPANY

COMPANY CHACO OIL
 COMPANY
 WELL 20-1 SANTA FE
PACIFIC
 FIELD WILDCAT
 LOCATION SEC. 20-20N-9W
 COUNTY McKINLEY
 STATE NEW MEXICO

Other Surveys

IND-ES GRN

Location of Well

C-SE-SE
 SEC. 20-20N-9W

Elevation: D.F.: --
 K.B.: 648
 or G.L.: 647

Log Depths Measured From KB 10 Ft. above G.L.

RUN No.	ONE		
Date	7-29-58		
First Reading	3935		
Last Reading	104		
Feet Measured	2931*		
Depth Reached	3936		
Bottom Driller	3938		
Mud Nat.	GEL CHEM		
Dens.	10.5	60	
Mud Resist.	2.2 @ 84 °F	@ °F	@ °F
" Res. BHT	1.7 @ 110 °F	@ °F	@ °F
" pH	-- @ °F	@ °F	@ °F
" Wtr. Loss	-- CC 30 min	CC 30 min	CC 30 min
" Rmf	1.6 @ 110 °F	@ °F	@ °F
" Rmc	2.0 @ 110 °F	@ °F	@ °F
Mud Log: Rm	1.7		
Depth	3750		
Bit Size	7 7/8"		
Sonde Type	PMS-A		
Pad Type	H		
Opr. Rig Time	3 HRS		
Truck No.	2515 FARM		
Recorded By	JULIUS		
Witness	BIRDSFEY		

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



Induction-Electrical Log

COUNTY <u>McKINLEY, N.M.</u> FIELD or LOCATION <u>WILDCAT</u> WELL <u>20-1 SANTA FE</u> COMPANY <u>CHACO OIL COMPANY</u>	COMPANY <u>CHACO OIL</u>	Other Surveys
	COMPANY	ML GRN
	WELL <u>20-1 SANTA FE</u>	Location of Well
	PACIFIC	C-SE-SE
	FIELD <u>WILDCAT</u>	SEC. 20-20N-9W
LOCATION <u>SEC. 20-20N-9W</u>		
COUNTY <u>McKINLEY</u>	Elevation: D.F.: --	
STATE <u>NEW MEXICO</u>	K.B.: <u>6481'</u>	
	or G.L.: <u>6471'</u>	
	FILING No. _____	

RUN No.	ONE				
Date	7-29-58				
First Reading	3930				
Last Reading	104				
Feet Measured	3826				
Csg. Schlum.	104				
Csg. Driller	96				
Depth Reached	3936				
Bottom Driller	3938				
Depth Datum	KB				
Mud Nat.	GEL CHEM				
Dens. Visc.	10.5 60				
Mud Resist.	2.2 @ 84 °F	@ °F	@ °F	@ °F	@ °F
" Res. BHT	1.7 @ 110 °F	@ °F	@ °F	@ °F	@ °F
Rmf	1.6 @ 110 °F	@ °F	@ °F	@ °F	@ °F
Rmc	2.0 @ 110 °F	@ °F	@ °F	@ °F	@ °F
" pH	-- @ °F	@ °F	@ °F	@ °F	@ °F
" Wtr. Loss	-- CC 30 min.	CC 30 min.	CC 30 min.	CC 30 min.	CC 30 min.
Bit Size	7 7/8"				
Spcgs.—AM	16"				
MN	27' 2"				
IND.	40"				
Opr. Rig Time	2 HRS				
Truck No.	2515 FARM				
Recorded By	JULIUS				
Witness	BIRDSEYE				

SCHLUMBERGER WELL SURVEYING CORPORATION

HOUSTON, TEXAS



SIMULTANEOUS

Gamma Ray-Neutron

COUNTY McKINLEY, N.M.
FIELD or WILDCAT
LOCATION 20-1 SANTA FE
WELL PACIFIC
COMPANY CHACO OIL COMPANY

COMPANY CHACO OIL
COMPANY
WELL 20-1 SANTA FE
PACIFIC
FIELD WILDCAT
LOCATION SEC. 20-20N-9W
COUNTY McKINLEY
STATE NEW MEXICO

Other Surveys

IND-ES ML

Location of Well

C-SE-SE
SEC. 20-20N-9W

Elevation: D.F.: - -

K.B.: 6481'

or G.L.: 6471'

FILING No. _____

Log Depths Measured From KB 10 Ft. above G.L.

RUN NO.	<u>ONE</u>	
Date	<u>7-29-58</u>	
First Reading	<u>3935</u>	
Last Reading	<u>0000</u>	
Footage Measured	<u>3935</u>	
Max. Depth Reached	<u>3936</u>	
Bottom Driller	<u>3938</u>	
Maximum Temp. °F.	<u>110°F.</u>	
Fluid Nature	<u>GEL CHEM</u>	
Fluid Level	<u>FULL</u>	
Casing Size	<u>8 5/8 in.</u>	
Casing Weight	<u>0 lb.</u>	to <u>96</u>
Casing Size	<u>in.</u>	
Casing Weight	<u>lb.</u>	to
Bit Size	<u>7 7/8 in.</u>	CSG. to T.D.
Bit Size	<u>in.</u>	to
No. Counters Used	<u>SCINT</u>	
Type Equipment	<u>GNAM-4</u>	
Type Panel	<u>GNP-C</u>	
Opr. Rig Time	<u>3 HRS</u>	
Truck No.	<u>2515 FARM</u>	
Observer	<u>JULIUS</u>	
Witness	<u>BIRDSEYE</u>	

LOGGING DATA

PROBE SIZE: 1-3/8" CALIBRATION: 300

DATE: 10-2-57 FIELD HDQTRS: Grants

HOLE NO.	29-10	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN
HOLE DIA.	5-7/8	IN	CASTING				
DRILLED DEPTH	2	FT					
LOGGED DEPTH	388	FT					
GAMMA SCALE	25	CPS					
TIME CONSTANT	8	SEC					
PAPER SPEED	10	FT/M					
LOGGING SPEED	10	FT/M	FT/M	FT/M	FT/M	FT/M	FT/M
RESISTANCE SCALE	25	ohm					
SELF POT SCALE	--	MV/IN					
BORE HOLE MEDIUM	011		WITH				
MUD READINGS			RESISTIVITY			TYPE BASE	
			VISCOSITY			SALINITY	
			WEIGHT			LBS/GAL	
CALIPER SCALE		INCH	LEG SIZE			PAPER SCALE	
TIME IN	1140		CASED TO			I. D.	IN
TIME OUT	1230		CORE INT.			DIAM	IN

LOCATION	TIME
EC 29 TWP. 20 RGE 9W	OFFICE:
COUNTY: McKinley	DRIVE: 0.1
STATE: N. M.	STANDBY:
AREA:	FIELD: 0.8
CLIENT: CHACO OIL	TOTAL: 0.9
Dr. Contractor	BREAKDOWN:
Log Received and	OPERATOR:
Approved By	Mash & Meek
H S Birdseye	PARTY NO: U-1



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY: CHACO OIL
BORE HOLE NO. 29-10

FIELD: Red Mountain
COUNTY: McKinley, N.M.
LOCATION: SEC. 29 TWP. 20N RGE. 9W

LOG. MEAS. FROM FILE NO.
DRLG. MEAS. FROM

DATE: LOCATION OF HOLE

FOOTAGE: + +

TOTAL DEPTH (DR): + +

HOLE DIAM.:

LOGGING SPEED

TIME CONSTANT

MUD TYPE

CASED TO

REMARKS: 011 in Casting

MINERALIZATION OR
DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K	KD	CORR. CPS.	% U3O8
Reading	Depth	Drift	Meg. Brng	True Bearing	

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

CALIPER

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE

LOGGING DATA

OBE SIZE: 1-3/8"		CALIBRATION: 300	
DATE: 10-2-57		FIELD HDQTRS: Grants	
HOLE NO.	29-15	RE. RUN	RE. RUN
HOLE DIA.	7-7/8 to 3 3/4", 4" to 4 1/2"	RE. RUN	RE. RUN
DRILLED DEPTH	538 FT	RE. RUN	RE. RUN
LOGGED DEPTH	469 FT	RE. RUN	RE. RUN
GAMMA SCALE	25 CPS	RE. RUN	RE. RUN
TIME CONSTANT	8 SEC	RE. RUN	RE. RUN
PAPER SPEED	10 FT/IN	RE. RUN	RE. RUN
LOGGING SPEED	10 FT/M	RE. RUN	RE. RUN
RESISTANCE SCALE	100 OHM	RE. RUN	RE. RUN
SELF POT SCALE	10 MV/IN	RE. RUN	RE. RUN
MOISTURE HOLE MEDIUM	Water	RE. RUN	RE. RUN
MUD READINGS	RESISTIVITY	RE. RUN	RE. RUN
	VISCOSITY	RE. RUN	RE. RUN
CALIBER SCALE	WEIGHT	RE. RUN	RE. RUN
TIME IN	2000	RE. RUN	RE. RUN
TIME OUT	2045	RE. RUN	RE. RUN
LOCATION		TIME	
EC. 29 TWP. 20 N RGE. 9 W		OFFICE:	
COUNTY: McKinley		DRIVE: 4.0	
STATE: New Mexico		STANDBY: 3.0	
REA: Red Mountain		FIELD: 0.8	
CLIENT: Chaco Oil		TOTAL: 7.8	
Operator:		BREAKDOWN:	
Approved By:		OPERATOR:	
Mash & Meek			
PARTY NO: U 1			



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY: CHACO OIL COMPANY	
BORE HOLE NO. 29-15	
FIELD Red Mountain	
COUNTY McKinley, New Mexico	
LOCATION: SEC. 29 TWP. 20 N RGE. 9 W	
LOG. MEAS. FROM	FILE NO.
DATE:	LOCATION OF HOLE
FOOTAGE	+
TOTAL DEPTH (DR)	+
HOLE DIAM.	+
LOGGING SPEED	
TIME CONSTANT	
MUD TYPE	
CASED TO	
REMARKS:	

MINERALIZATION OR
DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K	CORR. CPS.	% USGS
Reading	Depth	Drift	Mag. Ring	True Bearing

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR
INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

CALIPER

Century
COPY



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.

TULSA, OKLA., U.S.A.

EXPLORATION LOG

COMPANY: CHACO OIL

BORE HOLE NO. 20-8

FIELD Red Mountain

COUNTY McKinley, N.M.

LOCATION: SEC. 20 TWP. 20N RGE. 9W

LOG. MEAS. FROM	FILE
DRLG. MEAS. FROM	NO.
1	1
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100	100

DATE:

FOOTAGE

TOTAL DEPTH (DR)

HOLE DIAM.

LOGGING SPEED

TIME CON

MUD TYPE

CASED TO

REMARKS: Oil in casing

ELEVATION
KB
GL 6416
BKGRD. COUNT
SLUSH PIT CT.

6416

INTERPRETATION BY:

**RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR**

INTERPRETATION BY:

MINERALIZATION OR DIRECTIONAL DRIFT METER

[illegible]

GEOLOGIC TOPS

[illegible]

SELF POTENTIAL

CALIPER

LOGGING DATA

ROBE SIZE: 1-3/8"

CALIBRATION: 300

DATE: 10-2-57

FIELD HDQTRS: Grants

HOLE NO.	20-4	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN	RE. RUN
HOLE DIA.	5-7/8"	cased					
DRILLED DEPTH	?	FT					
LOGGED DEPTH	436	FT					
GAMMA SCALE	25	CPS					
TIME CONSTANT	8	SEC					
PAPER SPEED	10	FT/IN		FT/M		FT/M	
LOGGING SPEED	10	FT/M		FT/M		FT/M	
RESISTANCE SCALE	dry						
SELF POT SCALE	- mv/in	SELF POT T.D.					
BORE HOLE MEDIUM	dry	WITH TYPE BASE					
MUD READINGS	VISCOSITY	SALINITY					
CALIPER SCALE	WEIGHT	LBS/GAL PAPER SCALE					
TIME IN	1100	CASED TO CORE INT.		I.D. IN		IN	
TIME OUT	1135			D.I.A.M		IN	

LOCATION

TIME

SEC. TWP. RGE.

OFFICE:

COUNTY: McKinley

DRIVE: 3.0

STATE: N. M.

STANDBY:

AREA:

FIELD: 0.6

CLIENT: CHACO OIL

TOTAL: 3.6

Dr. Contractor

BREAKDOWN:

Log Received and

OPERATOR:

Approved By

Mash & Meeker

H S Birdseye

PARTY NO: U-1



GEOPHYSICAL CORP.
TULSA, OKLA., U.S.A.
EXPLORATION LOG

COMPANY: CHACO OIL

BORE HOLE NO. 20-4

FIELD Red Mountain

COUNTY McKinley

LOCATION: SEC. 20 TWP. 20N RGE. 9W

LOG. MEAS. FROM

FILE NO.

DRG. MEAS. FROM

DATE:

FOOTAGE

TOTAL DEPTH (DR)

HOLE DIAM.

LOGGING SPEED

TIME CONSTANT

MUD TYPE

CASED TO

LOCATION OF HOLE

ELEVATION KB

GL 6391

BKGRD. COUNT

SLUSH PIT CT.

REMARKS: Cased hole; no fluid

MINERALIZATION OR
DIRECTIONAL DRIFT METER

COUNTS PER SEC.	BED THICKNESS	K KD	CORR. CPS.	% U3O8
Reading	Depth	Depth	Mag. Bias	True Reading

RADIOMETRIC % VALUES COMPUTED WITHOUT
BENEFIT OF LOCAL ORE EQUILIBRIUM FACTOR

INTERPRETATION BY:

GEOLOGIC TOPS

FORMATION	DEPTHS	THICKNESS

SELF POTENTIAL

mv

CALIPER

+

NATURAL GAMMA RAY
COUNTS PER SECOND

RESISTANCE
OHMS

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE