

Well Name: TRUE GRIT FEDERAL 35	Well Location: T31N / R13W / SEC 35 / SWSW / 36.85054 / -108.180455	County or Parish/State: SAN JUAN / NM
Well Number: 13	Type of Well: CONVENTIONAL GAS WELL	Allottee or Tribe Name:
Lease Number: NMSF078463A	Unit or CA Name: BASIN FRUITLAND COAL	Unit or CA Number: NMNM112668, NMNM73527
US Well Number: 3004533512	Well Status: Producing Gas Well	Operator: HILCORP ENERGY COMPANY

Subsequent Report

Sundry ID: 2651595

Type of Submission: Subsequent Report

Type of Action: Other

Date Sundry Submitted: 01/07/2022

Time Sundry Submitted: 10:01

Date Operation Actually Began: 01/04/2022

Actual Procedure: Hilcorp Energy is requesting a record clean-up on the Pictured Cliffs formation top for the subject well. Based on Hilcorp Energy's review, there's a transition zone approximately between 1941' – 1958' when reviewing the GR/SP/Resistivity Logs. However, the PE/Rhob Logs combination shows that the base of the bottom coal seam within the Fruitland Formation lies about 1968', which HEC considers the base of the Fruitland Formation and the top of the Pictured Cliffs Formation. The attachment shows cross sections and logs for the True Grit 35#13. The last slide shows both logs side to side. The display on the right shows the PE curve in red in the first track and the density curve in the third track. An updated schematic showing the Picture Cliffs top at 1968' is attached.

SR Attachments

Actual Procedure

True_Grit_35_13_DATA_BLM_Submitted_20220107100050.pdf

Well Name: TRUE GRIT FEDERAL 35**Well Location:** T31N / R13W / SEC 35 /
SWSW / 36.85054 / -108.180455**County or Parish/State:** SAN
JUAN / NM**Well Number:** 13**Type of Well:** CONVENTIONAL GAS
WELL**Allottee or Tribe Name:****Lease Number:** NMSF078463A**Unit or CA Name:** BASIN FRUITLAND
COAL**Unit or CA Number:**
NMNM112668, NMNM73527**US Well Number:** 3004533512**Well Status:** Producing Gas Well**Operator:** HILCORP ENERGY
COMPANY

Operator Certification

I certify that the foregoing is true and correct. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. Electronic submission of Sundry Notices through this system satisfies regulations requiring a submission of Form 3160-5 or a Sundry Notice.

Operator Electronic Signature: PRISCILLA SHORTY**Signed on:** JAN 07, 2022 10:00 AM**Name:** HILCORP ENERGY COMPANY**Title:** Regulatory Technician**Street Address:** 382 Road 3100**City:** Aztec**State:** NM**Phone:** (505) 324-5188**Email address:** pshorty@hilcorp.com

Field Representative

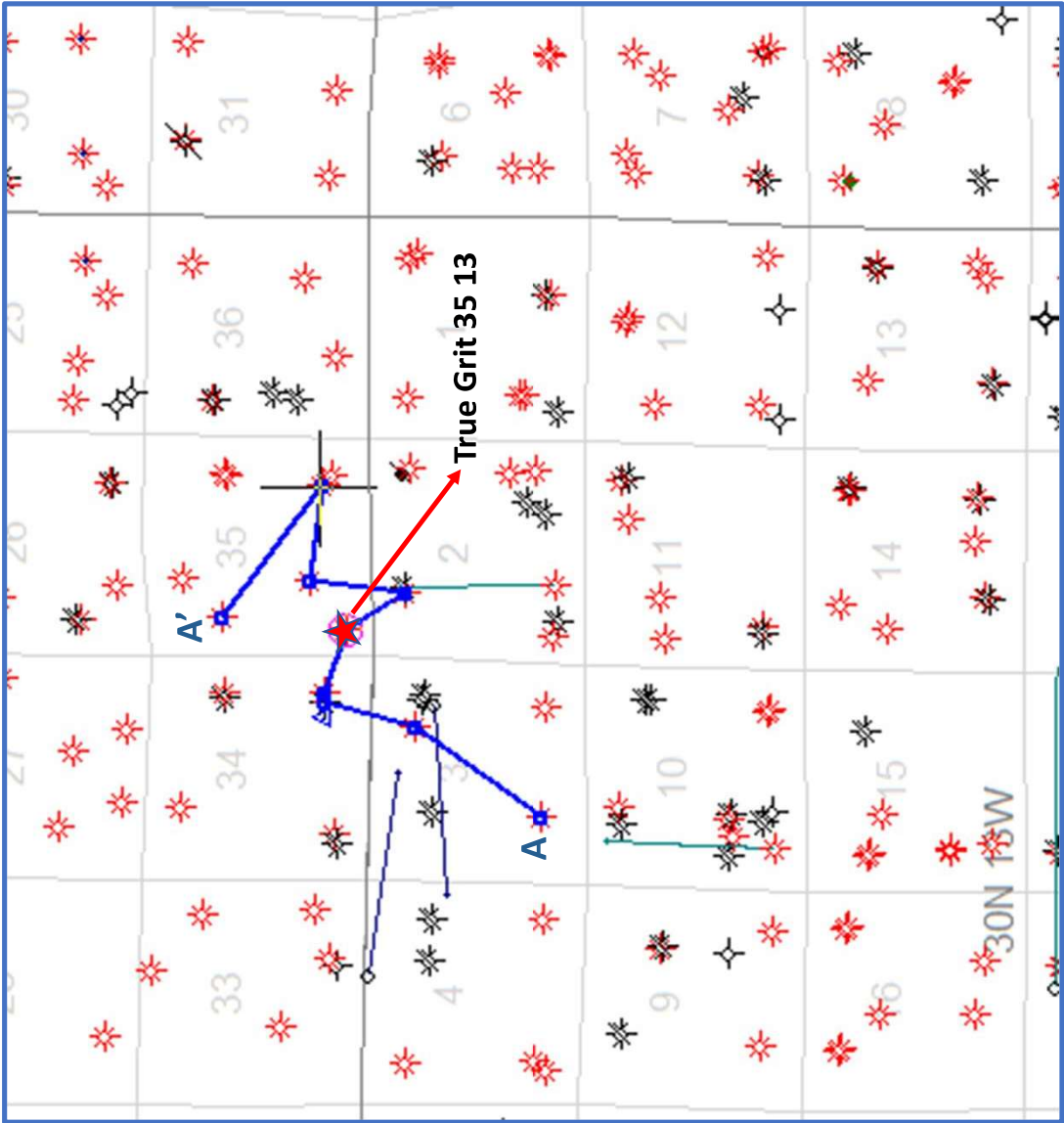
Representative Name:**Street Address:****City:****State:****Zip:****Phone:****Email address:**

BLM Point of Contact

BLM POC Name: DAVE J MANKIEWICZ**BLM POC Title:** AFM-Minerals**BLM POC Phone:** 5055647761**BLM POC Email Address:** DMANKIEW@BLM.GOV**Disposition:** Approved**Disposition Date:** 01/19/2022**Signature:** Dave Mankiewicz

**True Grit 35 13 PC Top
3004533512**

Basemap



Cross-Section

A'



WCCORD 014E
300452674700
6,485
9/66
<3,682FT>

J F BELL 002
300451180900
6,681
9/66
<2,217FT>

LANGENDORF 001E
300452434800
6,635
6/80
<222FT>

MCCLINTOCK 001
300452592600
2,155
3/00
<1,631FT>

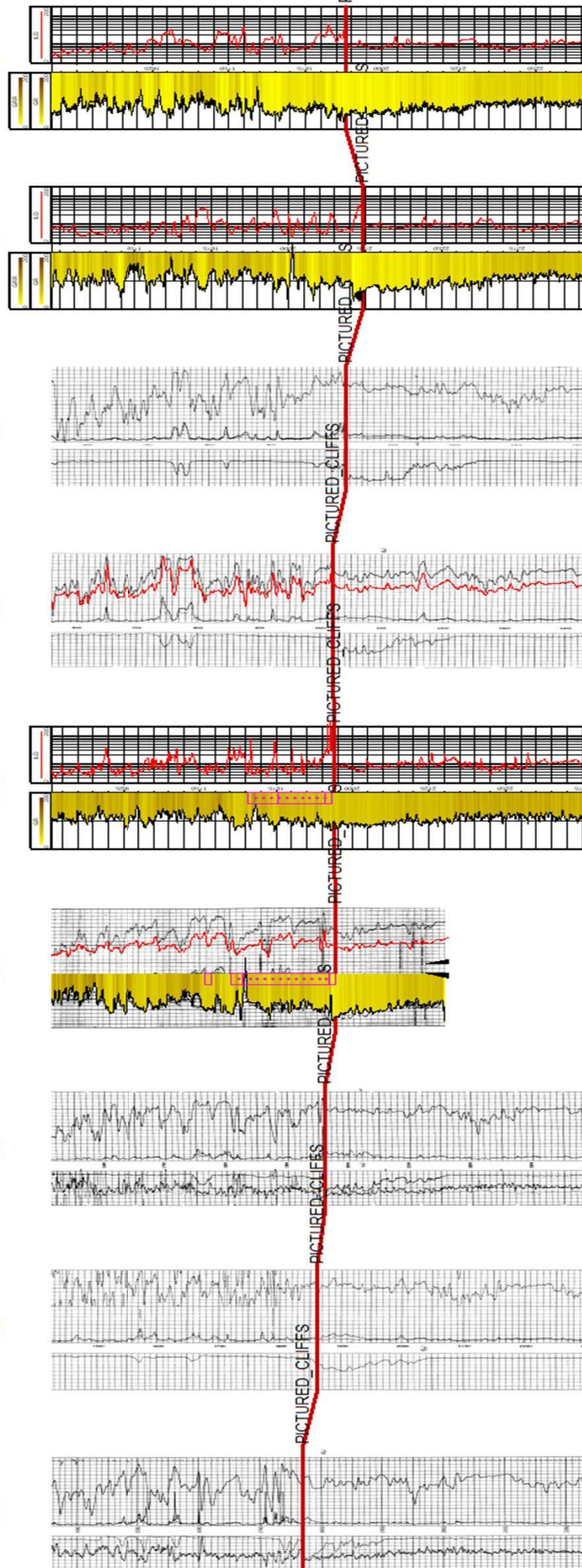
TRUE GRIT FED 3 013
300453351200
6,665
5/06
<1,625FT>

STATE GAS UN-BJ 001
300451000800
6,620
3/65
<2,299FT>

GOVT 001-35
300451008800
6,680
5/59
<2,317FT>

PAYNE 001E
300452434900
6,950
8/80
<3,955FT>

PAYNE 001E
300452588200
6,800
3/84
<3,955FT>

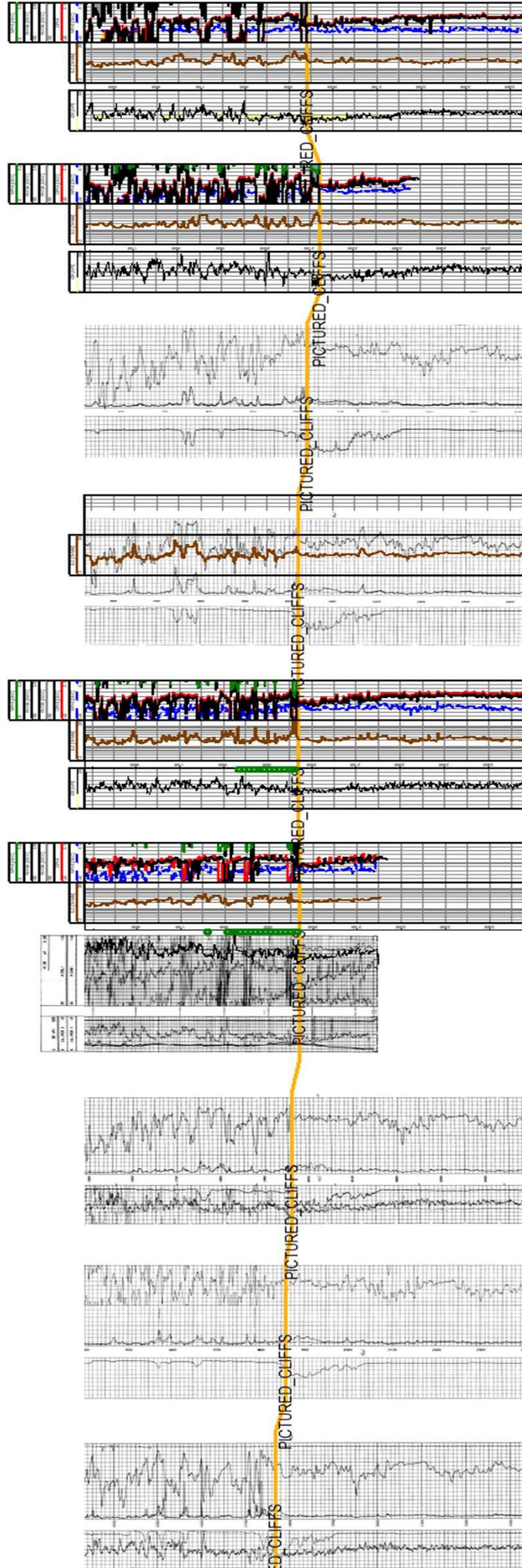


Cross-Section

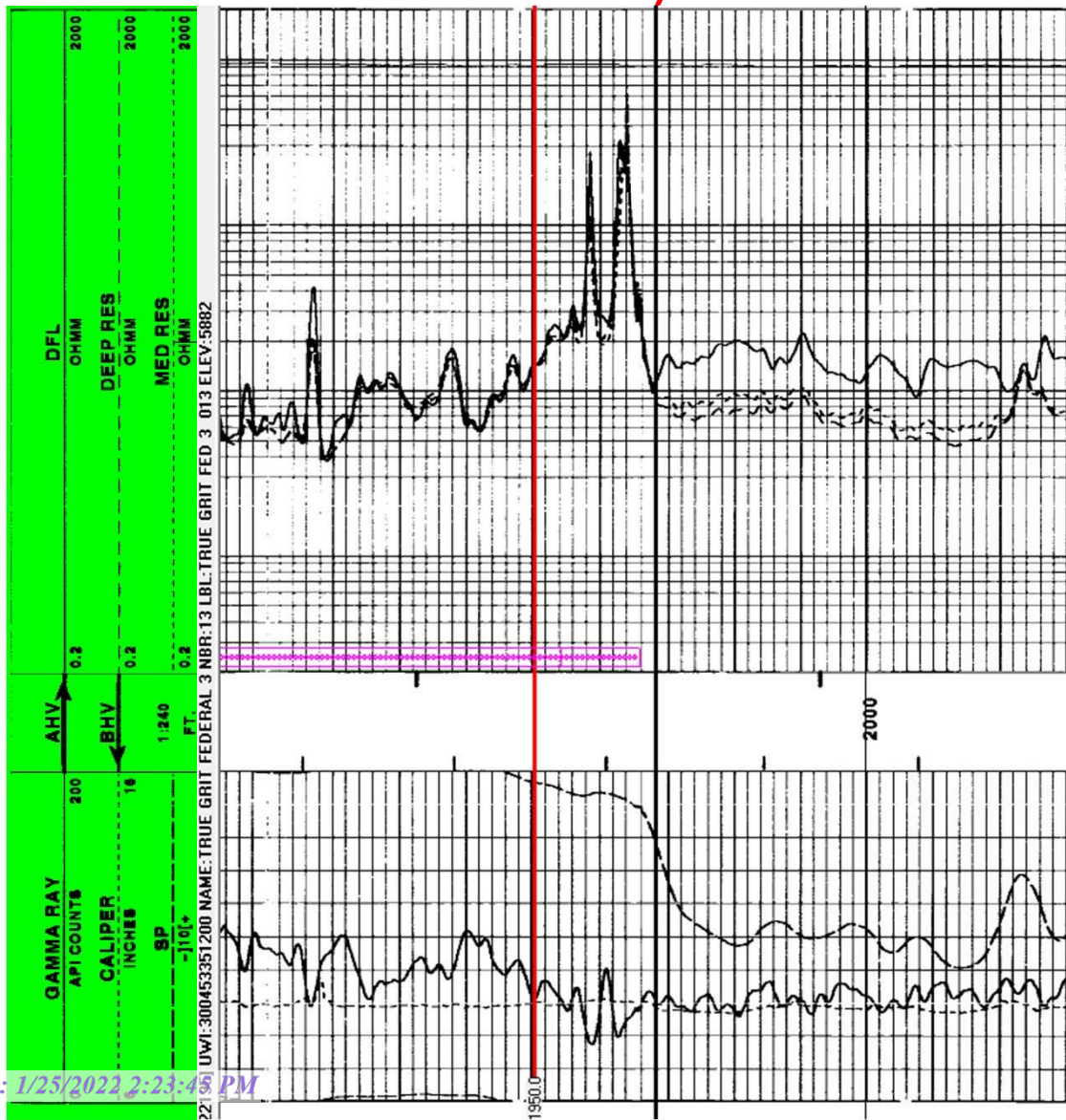
A'



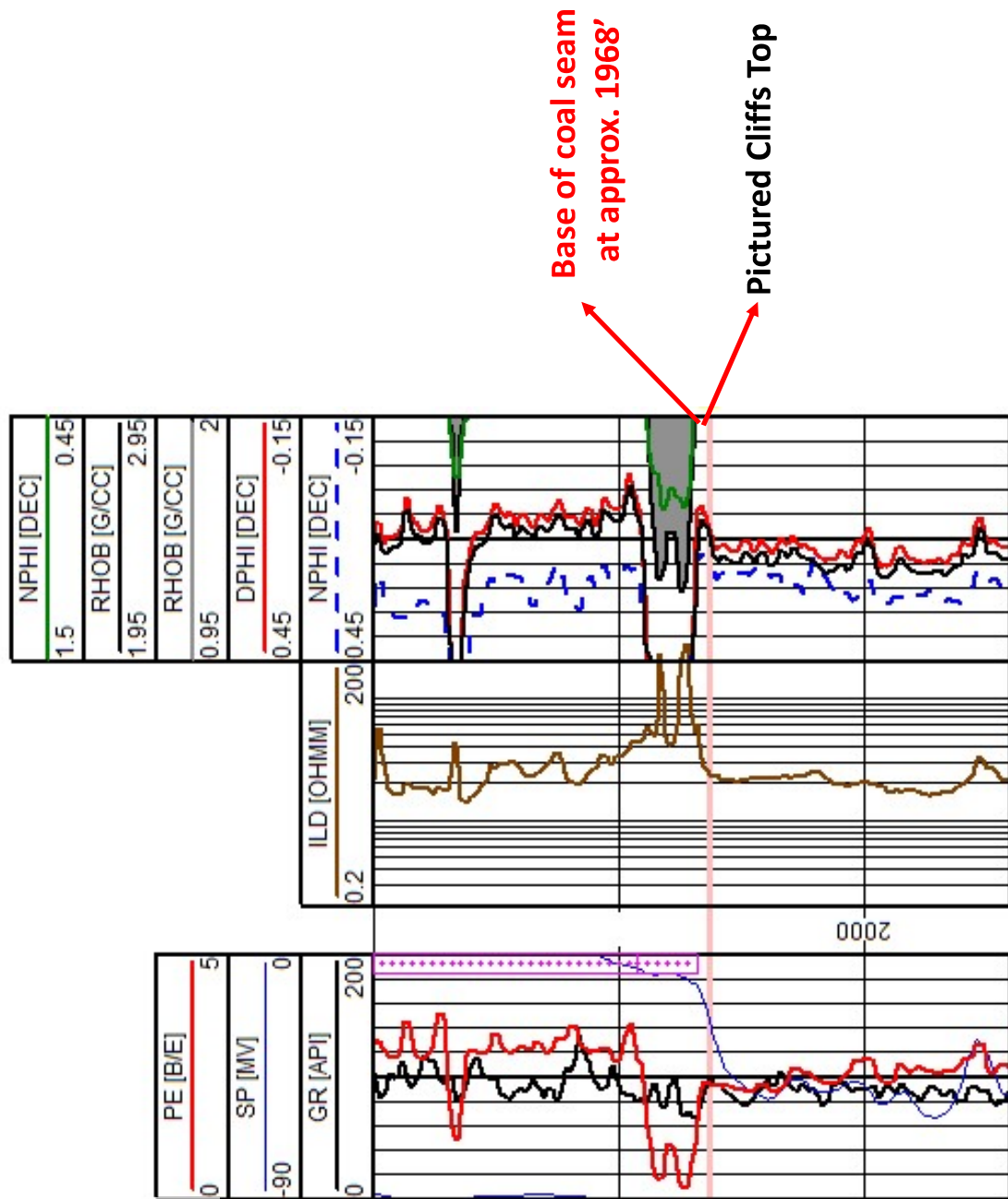
WELL 014E 30042574700 ELEV KB 3.732 988	<3,682FT>	J.F. BELL 002 300451189500 ELEV KB 3.600 988	<2,217FT>	LANGENDORF 001E 300452434800 ELEV KB 3.586 680	<222FT>	MCCLEINTOCK 001 300452592600 ELEV KB 3.580 300	<1,631FT>	TRUE GRIT FED 3 013 300453351200 ELEV KB 3.582 506	<1,625FT>	STATE GAS UNB.J. 001 300451008600 ELEV KB 3.594 365	<2,299FT>	GOVT 001:35 300451008600 ELEV KB 3.596 569	<2,317FT>	PAYNE 001E 300452434800 ELEV KB 3.587 880	<3,955FT>	PAYNE 002E 300452588200 ELEV KB 3.584 384
--	-----------	---	-----------	---	---------	---	-----------	---	-----------	--	-----------	---	-----------	--	-----------	--

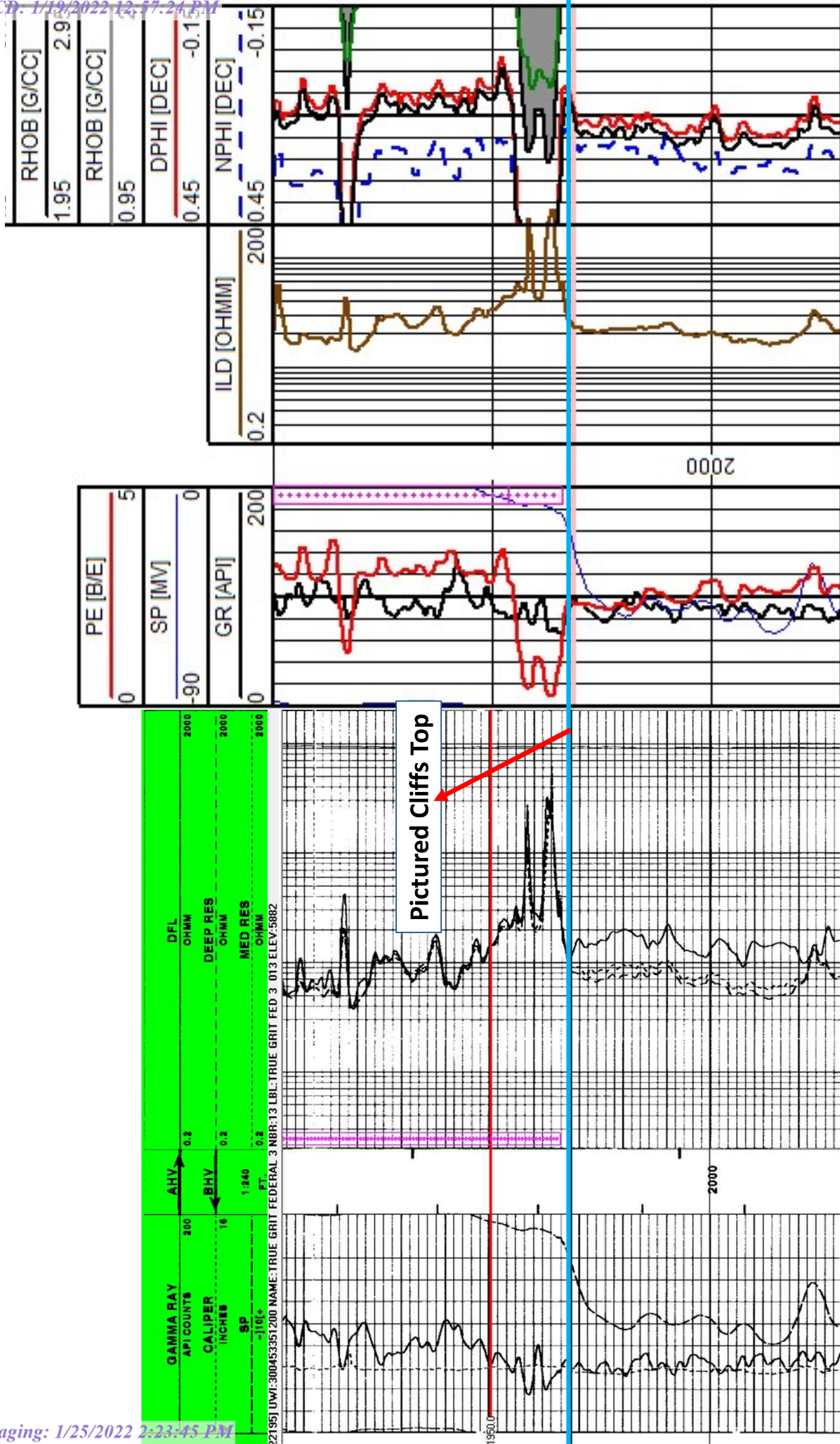


True Grit 35 13



TRUE GRIT FED 3 013





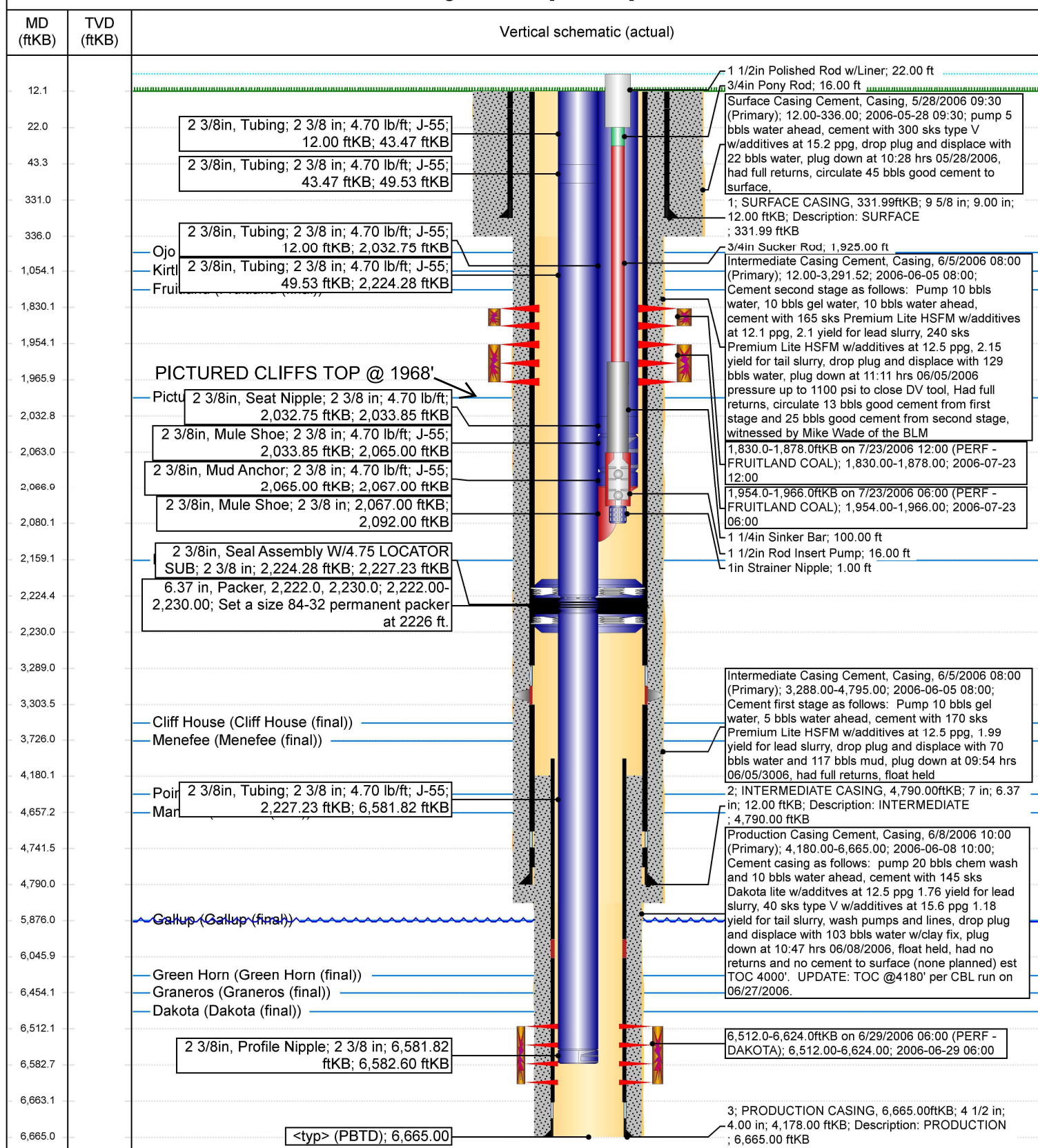


Current Schematic - Version 3

Well Name: TRUE GRIT 35 #13

API / UWI 3004533512	Surface Legal Location M-35-31N-13W	Field Name BASIN	Route 0205	State/Province NEW MEXICO	Well Configuration Type Vertical
Ground Elevation (ft) 5,870.00	Original KB/RT Elevation (ft) 5,882.00	KB-Ground Distance (ft) 12.00	KB-Casing Flange Distance (ft)	KB-Tubing Hanger Distance (ft)	

Original Hole [Vertical]



Priscilla Shorty

From: Pickford, Katherine, EMNRD <Katherine.Pickford@state.nm.us>
Sent: Tuesday, January 4, 2022 8:21 AM
To: Gage, Walter J; Priscilla Shorty
Cc: Wenman, Christopher P
Subject: RE: [EXTERNAL] True Grit Federal 35 # 13 Fruitland/PC contact

Priscilla,
OCD accepts BLM's interpretation of the PC top.
Please submit a sundry containing

1. An explanation of the review conducted to change the PC top pick,
2. A corrected well bore diagram, showing the correct PC top,
3. A cross section of the area, identifying the trend of the PC top.

Thanks,
Kate

From: Gage, Walter J <WGage@blm.gov>
Sent: Monday, January 3, 2022 12:06 PM
To: Pickford, Katherine, EMNRD <Katherine.Pickford@state.nm.us>; Priscilla Shorty <pshorty@hilcorp.com>
Cc: Wenman, Christopher P <cwenman@blm.gov>; Mankiewicz, David J <dmankiew@blm.gov>; Rennick, Kenneth G <krennick@blm.gov>
Subject: [EXTERNAL] True Grit Federal 35 # 13 Fruitland/PC contact

CAUTION: This email originated outside of our organization. Exercise caution prior to clicking on links or opening attachments.

Hi All,

My first response is that the 1954'-1966' interval is within what could easily be considered a transitional zone between the Fruitland and the PC. As such the placement of the top and any perforations within that zone is a somewhat subjective task.

Examining the disputed region of the the SP curve in Log 3004533512_1 the identified transition between the formations extends from 1941' to 1980'. The track of the SP above 1941' delineates the shale line. The movement left at that point signals the addition of sand and the beginning of the transition zone. The initial expression of the massive sand of the PC is the point of the SP at 1980' and marks the end of the transition zone.

The GR track over that interval shows a coarsening from 1941' to 1960', two prominent peaks and then a relatively consistent profile from 1968' to the base of the PC.

The two Resistance tracks show a gentle increase in the 1941' to 1958' zone then a 10' zone of widely varying resistance ending at 1968' with water signature which extends to the base of the PC.

There is a change in the Conductivity display at the zone of widely varying resistance, 1958' to 1968'. Below here to the base of the PC is has a more consistent profile.

Looking specifically at 1958' and 1968' is seems to me 1958' most prominently marks the beginning of the zone of varying resistivity and one of the two prominent GR peaks. 1968' marks the bottom of the zone of varying resistance, the start of the more consistent conductivity profile and the beginning of serious sand accumulation on the SP.

Examining the bulk density display on the second log, 3004533512_2, the first thing to notice is an approximately 10' thick section of coal at the base of the Fruitland ending somewhere between 1968' and 1970'. The second thing is that the PE curve tracks this coal as well over this same interval.

The top of the PC is somewhat subjective based on only the first log but with the addition of the density and PE curves the top of the Picture Cliffs is at the base of the last coal-approximately 1968'.

I shared this with Chris Wenman of our office, he agrees.

Walter Gage

District I
1625 N. French Dr., Hobbs, NM 88240
Phone:(575) 393-6161 Fax:(575) 393-0720
District II
811 S. First St., Artesia, NM 88210
Phone:(575) 748-1283 Fax:(575) 748-9720
District III
1000 Rio Brazos Rd., Aztec, NM 87410
Phone:(505) 334-6178 Fax:(505) 334-6170
District IV
1220 S. St Francis Dr., Santa Fe, NM 87505
Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico
Energy, Minerals and Natural Resources
Oil Conservation Division
1220 S. St Francis Dr.
Santa Fe, NM 87505

CONDITIONS

Action 73511

CONDITIONS

Operator: HILCORP ENERGY COMPANY 1111 Travis Street Houston, TX 77002	OGRID: 372171
	Action Number: 73511
	Action Type: [C-103] Sub. General Sundry (C-103Z)

CONDITIONS

Created By	Condition	Condition Date
kpickford	None	1/25/2022