

U.S. Department of the Interior BUREAU OF LAND MANAGEMENT Sundry Print Report

Well Name: SERENDIPITY Well Location: T26N / R13W / SEC 26 / County or Parish/State: SAN

Well Number: 4 Type of Well: OTHER Allottee or Tribe Name:

Lease Number: NMNM33031 Unit or CA Name: E2, FRCL Unit or CA Number:

NMNM91285

US Well Number: 300452999600S1 **Well Status:** Gas Well Shut In **Operator:** MUSTANG

RESOURCES LLC

Notice of Intent

Sundry ID: 2642613

Type of Submission: Notice of Intent

Type of Action: Plug and Abandonment

Date Sundry Submitted: 11/03/2021 Time Sundry Submitted: 07:56

Date proposed operation will begin: 12/09/2021

Procedure Description: Mustang requests approval to Plug & Abandon the Serendipity 4. Attached are a current wellbore diagram, proposed P&A procedure, cement calculations, and post-P&A wellbore diagram.

Surface Disturbance

Is any additional surface disturbance proposed?: No

NOI Attachments

Procedure Description

Serendipity_4_Cement_Calculations_20211103075542.pdf

Serendipity_4_Post_P_A_WBD_20211103075524.pdf

 $Serendipity_4_P_A_Procedure_20211103075501.pdf$

Serendipity_4_P_A_Current_WBD_20211103075447.pdf

Well Location: T26N / R13W / SEC 26 / County or Parish/State: SAN

NWNE / 36.463511 / -108.184513

Well Number: 4 Type of Well: OTHER Allottee or Tribe Name:

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NMNM91285

JUAN / NM

US Well Number: 300452999600S1 Well Status: Gas Well Shut In Operator: MUSTANG

RESOURCES LLC

Conditions of Approval

Additional Reviews

2642613_NOIA_Serendipity_4_3004529996_KR_12092021_20211209131502.pdf

General_Requirement_PxA_20211209131433.pdf

26N13W26BKpc_Serendipity_4_20211209115026.pdf

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: DEB LEMON Signed on: NOV 03, 2021 08:08 AM

Name: MUSTANG RESOURCES LLC

Title: RegulatoryManager

Street Address: 1660 Lincoln St., Ste 1450

City: Denver State: CO

Phone: (720) 550-7507

Email address: dlemon@mustangresourcesllc.com

Field Representative

Representative Name: Don Johnson Street Address: 1220 S. Main Avenue

City: Aztec State: NM Zip: 87410

Phone: (505)334-9111

Email address: djohnson@mustangresourcesllc.com

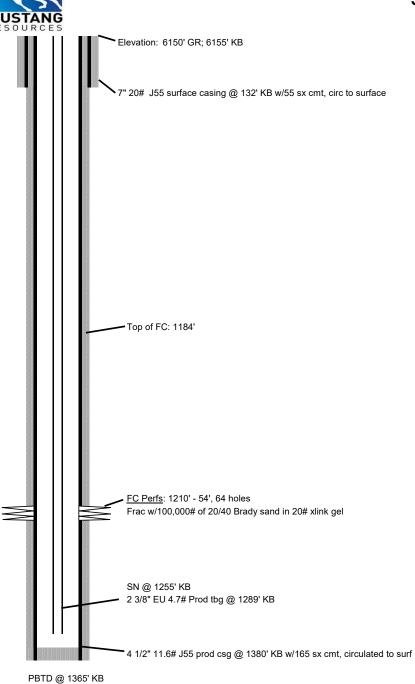
BLM Point of Contact

Signature: Kenneth Rennick

BLM POC Name: KENNETH G RENNICK BLM POC Title: Petroleum Engineer

BLM POC Phone: 5055647742 BLM POC Email Address: krennick@blm.gov

Disposition: Approved **Disposition Date:** 12/09/2021



Serendipity 4

Location: Surface: 1080' FNL, 1450' FEL,

Sec 26, T26N, R13W, San Juan

County, New Mexico

Field: Basin FC

Zone: Fruitland Coal

API#: 30-045-29996

Spud Date: December 19, 2002

Revised: 8/22/11

5/31/2007 1 1/4" x 12' RHAC pump 49 ea rods 2 ea 4' pony rods 1 ea 6' pony rod 1 x 8' pony rod

TD @ 1395'

Company Na Mustang Resources LLC

Well Name: Serendipity 4 API Number: 30-045-29996

Location: 1080' FNL, 1450' FEL, Sec 26, T26N, R13W

County: San Juan, NM

Note: Follow all BLM/NMOCD Rules and Regulations.

4-1/2", 11.6# Capacit	y 0.0873 ft3/ft	2-3/8", 4.7# Capacity	0.0217 ft3/ft
	0.0155 bbl/ft		0.0039 bbl/ft
II	O 4.000 Inches		1.995 Inches

<u>Step</u>	<u>Description</u>
	Proposed P&A Procedure
1	Back drag & clean location for crew & rig safety. Test anchors if needed, arrange for H20 on site
2	Prior to rig, verify wellhead conncections for any flanges and BOPE necessary.
3	Notify NMOCD/BLM 48 hours before commencing P&A operations
4	MIRU well service rig and associated P&A equipment
5	Bleed pressure from well to tank (well has very little pressure)
6 7	Pull Rods laying down ND WH & NU BOP
8	Pull 2-3/8" Tubing (lay down any bad joints)
9	Ensure there is enough 2-3/8" workstring to complete job
10	TIH with 4.5" 11.6# casing scraper to 1250' w/2-3/8" tubing (use new workstring as needed)
11	TOH with 4.5" casing scraper
12	TIH with 4.5" CIBP w/2-3/8" tubing and Set @1165' KB
13	Release from CIBP and pull up hole to 1160' and circulate casing full with fresh water
14	Close Pipe Rams and pressure test casing to 560#
15 16	NOTE: No CBL required-Cement on record was cemented to surface behind 4-1/2 csg (12-23-02) If pressure test is good, proceed, if does not pass, must wait a min of 4 hours & tag cmt tops
17	Plug 1: CIBP Cap with CIBP @ 1165', with 2-3/8" tbg @ 1160', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 777' and reverse circulate hole clean.
18	With tubing @ 777', circulate hole
19	Plug 2: Fruitland Coal top @ 727' KB, with 2-3/8" tbg @ 777' KB', place balanced plug mixing 7.6 sx (8.73 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 177' and reverse circulate hole clean.
20	With tubing @ 177', circulate hole
	Plug 3: Kirtland Shale top @ 127' KB, with 2-3/8" tbg @ 177' KB', place balanced plug mixing 13.4 sx (15.45 ft3) cement plus 50% excess and until good cement to surface, TOH
21	with 2-3/8" tbg laying down on trailer. Top off casing with cement.
22	Top off cement in casing
23	ND BOP and cut off casing and install P&A marker to comply with regulations
24	RD and move off location

Serendipity 4 Proposed P&A Procedures Formation Elevation: 6150' GR; 6155' KB Surface: 1080' FNL, 1450' FEL, Location: Tops Sec 26, T26N, R13W, San Juan Ojo Alamo County, New Mexico surface 7" 20# J55 surface casing @ 132' KB w/55 sx cmt, circ 5 bbls to surface (12/19/02) Kirtland Shale Field: Basin FC 127 Plug 3: Kirtland Shale top @ 127' KB, with 2-3/8" tbg @ 177' KB', place balanced plug mixing 13.4 sx (15.45 ft3) cement plus 50% excess and Zone: Fruitland Coal until good cement to surface, TOH with 2-3/8" tbg laying down on trailer. 30-045-29996 Top off casing with cement. Spud Date: December 19, 2002 Revised: 10/27/21 Plug 2: Fruitland Coal top @ 727' KB, with 2-3/8" tbg @ 777' KB', place balanced plug mixing 7.6 sx (8.73 ft3) Friutland Coal cement plus 50% excess, TOH with 2-3/8" tbg to 177' and reverse circulate hole clean. 727 Plug 1: CIBP Cap with CIBP @ 1165', with 2-3/8" tbg @ 1160', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 777' and reverse circulate hole clean. CIBP Set CIBP at 1165' FC Perfs: 1210' - 54', 64 holes Frac w/100,000# of 20/40 Brady sand in 20# xlink gel Pictured Cliffs 4 1/2" 11.6# J55 prod csg @ 1380' KB w/165 sx cmt, circulated 11 bls to surf (12/23/02) PBTD @ 1365' KB TD @ 1395'

P&A Sketch dlj

Serendipity Com 4

Proposed PxA Calculations

	Proposed P&A Well Calculations						
OH/Casing/Tubing Details							
4-1/2" 11.6#	Capacity	0.0873 ft3/ft	2-3/8", 4.7# Capacity	0.0217 ft3/ft			
		0.0155 bbl/ft		0.0039 bbl/ft			
	ID	4.000 Inches	drift	1.995 Inches			
			Landed @	1289 feet KB			

NOTE: Each Cement Job required to place cement as follows

- 1. OD of pipe 50' below and 50' above Formation Top with 100% excess
- 2. ID of pipe 50' below and 50' above Formation Top with 50% excess
- 3. ALL cement will be Class G, Density 15.8 ppg and Yield 1.15 cf/sx

Plug 1: CIBP Cap FC Top Perf 1210 ft

CIBP @ 1165 Cement Top 1115

Open Hole Capacity (NA-cemented to Surface)

feet plus 50% excess sxs Inside Pipe Capacity 3.7957 ft3 4.365 100' Inside Casing ft3 2.1825 50% excess 6.5475 Total ft3 Inside Pipe ft3 ft3 7 Rounded up 1.29 **Total BBLS** bbls 6.09 Total Sxs Cement SXS

Total Sxs Cement 6.09

Plug 1: CIBP Cap with CIBP @ 1165', with 2-3/8" tbg @ 1160', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 777' and reverse circulate hole clean.

Plug 2: Fruitland Coal Formation Top 727 ft

Bttm of Plug @ 777 Cement Top 677

Open Hole Capacity (NA-cemented to Surface)

	100	feet plus	eet plus 50% excess					
sxs		Inside Pipe Capacity						
7.6	ft3	8.73	8.73 100' Inside Casing					
	ft3	4.365	50% excess					
	ft3	13.095	Total ft3 Inside Pipe					
	ft3	14	Rounded up					
	bbls	2.59	Total BBLS					
	SXS	12.17	Total Sxs Cement					

Total Sxs Cement 12.17

Plug 2: Fruitland Coal top @ 727' KB, with 2-3/8" tbg @ 777' KB', place balanced plug mixing 7.6 sx (8.73 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 177' and reverse circulate hole clean.

Plug 3: Kirtland Shale Formation Top 127 ft

Bttm of Plug @ 177 Cement Top 0

Open Hole Capacity (NA-cemented to Surface)

	177	177 feet plus 50% excess					
sxs		Inside Pipe Capacity					
13.4	ft3	15.4521	100' Inside Casing				
	ft3	7.72605	50% excess				
	ft3	23.1782	Total ft3 Inside Pipe				
	ft3	24	Rounded up				
	bbls	4.44	Total BBLS				
	SXS	20.87	Total Sxs Cement				

Total Sxs Cement 20.87

Plug 3: Kirtland Shale top @ 127' KB, with 2-3/8" tbg @ 177' KB', place balanced plug mixing 13.4 sx (15.45 ft3) cement plus 50% excess and until good cement to surface, TOH with 2-3/8" tbg laying down on trailer. Top off casing with cement.

BLM FLUID MINERALS P&A Geologic Report

Date Completed: 12/9/2021

Well No. Serendipity #4 (API# 30-0-	Location	1080	FNL	&	1450	FEL	
Lease No. NMNM-33031	Sec. 26	T26N			R13W		
Operator Mustang Resources, LLC		County	San Juan		State	New Mexico	
Total Depth 1395'	PBTD 1365' Formation Fruitland coal						
Elevation (GL) 6150'	Elevation (KE	3) 6155'					

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm	Surface	27			Surface/freshwater sands
Ojo Alamo Ss	27	127			Aquifer (freshwater)
Kirtland Shale	127	727			
Fruitland Fm	727	1254			Coal/Gas/Possible water
Pictured Cliffs Ss	1254	PBTD			Possible Gas
Lewis Shale					
Chacra					
Cliff House Ss					
Menefee Fm					
Point Lookout Ss					
Mancos Shale					
Gallup					
Greenhorn					
Graneros Shale					
Dakota Ss					

Remarks:

P & A

- CBL on file.

Reference Well:
1) Formation Tops

Same

- Add a plug to cover the Pictured Cliffs top at 1254'.
- The plugs proposed in the P&A procedure, with changes as recommended above, will adequately protect any freshwater sands in this well bore.
- Fruitland perfs 1210' 1254'.

Prepared by: Chris Wenman

UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT FARMINGTON DISTRICT OFFICE

6251 COLLEGE BLVD. FARMINGTON, NEW MEXICO 87402

AFMSS 2 Sundry ID 2642613

Attachment to notice of Intention to Abandon

Well: Serendipity 4

CONDITIONS OF APPROVAL

- 1. Plugging operations authorized are subject to the attached "General Requirements for Permanent Abandonment of Wells on Federal and Indian Lease."
- 2. Farmington Office is to be notified at least 24 hours before the plugging operations commence (505) 564-7750.
- 3. Before or within 30 days after completing work, Mustang Resources LLC must contact a Farmington Field Office surface inspection staff to schedule a reclamation onsite.
- 4. The following modifications to your plugging program are to be made:
 - a) Add a plug to cover the Picture Cliffs formation top at 1254 feet.

You are also required to place cement excesses per 4.2 and 4.4 of the attached General Requirements.

Office Hours: 7:45 a.m. to 4:30 p.m.

K. Rennick 12/09/2021

GENERAL REQUIREMENTS FOR PERMANENT ABANDONMENT OF WELLS ON FEDERAL AND INDIAN LEASES FARMINGTON FIELD OFFICE

- 1.0 The approved plugging plans may contain variances from the following <u>minimum general</u> requirements.
 - 1.1 Modification of the approved plugging procedure is allowed only with the prior approval of the Authorized Officer, Farmington Field Office.
 - 1.2 Requirements may be added to address specific well conditions.
- 2.0 Materials used must be accurately measured. (densometer/scales)
- 3.0 A tank or lined pit must be used for containment of any fluids from the wellbore during plugging operations and all pits are to be fenced with woven wire. These pits will be fenced on three sides and once the rig leaves location, the fourth side will be fenced.
 - 3.1 Pits are not to be used for disposal of any hydrocarbons. If hydrocarbons are present in the pit, the fluids must be removed prior to filling in.
- 4.0 All cement plugs are to be placed through a work string. Cement may be bull-headed down the casing with prior approval. Cement caps on top of bridge plugs or cement retainers may be placed by dump bailer.
 - 4.1 The cement shall be as specified in the approved plugging plan.
 - 4.2 All cement plugs placed inside casing shall have sufficient volume to fill a minimum of 100' of the casing, or annular void(s) between casings, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.3 Surface plugs may be no less than 50' in length.
 - 4.4 All cement plugs placed to fill annular void(s) between casing and the formation shall be of sufficient volume to fill a minimum of 100' of the annular space plus 100% excess, calculated using the bit size, or 100' of annular capacity, determined from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug.
 - 4.5 All cement plugs placed to fill an open hole shall be of sufficient volume to fill a minimum of 100' of hole, as calculated from a caliper log, plus an excess volume sufficient to provide for 50 linear feet of fill above the plug. In the absence of a caliper log, an excess of 100% shall be required.
 - 4.6 A cement bond log or other accepted cement evaluation tool is required to be run if one had not been previously ran or cement did not circulate to surface during the original casing cementing job or subsequent cementing jobs.

2

- 5.0 All cement plugs spotted across, or above, any exposed zone(s), when; the wellbore is not full of fluid or the fluid level will not remain static, and in the case of lost circulation or partial returns during cement placement, shall be tested by tagging with the work string.
 - 5.1 The top of any cement plug verified by tagging must be at or above the depth specified in the approved plan, without regard to any excess.
 - 5.2 Testing will not be required for any cement plug that is mechanically contained by use of a bridge plug and/or cement retainer, if casing integrity has been established.
 - 5.3 Any cement plug which is the only isolating medium, for a fresh water interval or a zone containing a prospectively valuable deposit of minerals, shall be tested by tagging.
 - 5.4 If perforations are required below the surface casing shoe, a 30 minute minimum wait time will be required to determine if gas and/or water flows are present. If flow is present, the well will be shut-in for a minimum of one hour and the pressure recorded. Short or long term venting may be necessary to evacuate trapped gas. If only a water flow occurs with no associated gas, shut well in and record the pressures. Contact the Engineer as it may be necessary to change the cement weight and additives.
- 6.0 Before setting any cement plugs the hole needs to be rolled. All wells are to be controlled by means of a fluid that is to be of a weight and consistency necessary to stabilize the wellbore. This fluid shall be left in place as filler between all plugs.
 - 6.1 Drilling mud may be used as the wellbore fluid in open hole plugging operations.
 - 6.2 The wellbore fluid used in cased holes shall be of sufficient weight to balance known pore pressures in all exposed formations.
- 7.0 A blowout preventer and related equipment (BOPE) shall be installed and tested prior to working in a wellbore with any exposed zone(s); (1) that are over pressured, (2) where the pressures are unknown, or (3) known to contain H_2S .
- 8.0 Within 30 days after plugging work is completed, file a Sundry Notice, Subsequent Report of Abandonment (Form 3160-5), five copies, with the Field Manager, Bureau of Land Management, 6251 College Blvd., Suite A, Farmington, NM 87402. The report should show the manner in which the plugging work was carried out, the extent, by depth(s), of cement plugs placed, and the size and location, by depth(s), of casing left in the well. Show date well was plugged.
- 9.0 All permanently abandoned wells are to be marked with a permanent monument as specified in 43 CFR 3162.6(d). Unless otherwise approved.
- 10.0 If this well is located in a Specially Designated Area (SDA), compliance with the appropriate seasonal closure requirements will be necessary.

All of the above are minimum requirements. Failure to comply with the above conditions of approval may result in an assessment for noncompliance and/or a Shut-in Order being issued pursuant to 43 CFR 3163.1. You are further advised that any instructions, orders or decisions issued by the Bureau of Land Management are subject to administrative review pursuant to 43 CFR 3165.3 and appeal pursuant to 43 CFR 3165.4 and 43 CFR 4.700.

(October 2012 Revision)

Company Na Mustang Resources LLC

Well Name: Serendipity 4 API Number: 30-045-29996

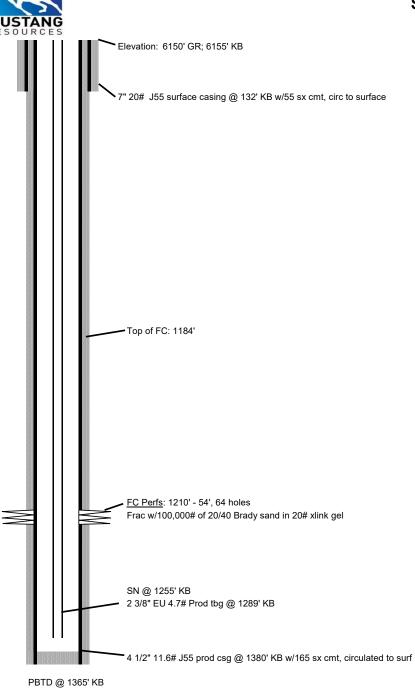
Location: 1080' FNL, 1450' FEL, Sec 26, T26N, R13W

County: San Juan, NM

Note: Follow all BLM/NMOCD Rules and Regulations.

4-1/2", 11.6# Cap	oacity 0.0873	ft3/ft 2	2-3/8", 4.7#	Capacity	0.0217	ft3/ft
	0.0155	bbl/ft			0.0039	bbl/ft
	ID 4.000	Inches			1.995	Inches

<u>Step</u>	<u>Description</u>
	Proposed P&A Procedure
1	Back drag & clean location for crew & rig safety. Test anchors if needed, arrange for H20 on site
2	Prior to rig, verify wellhead conncections for any flanges and BOPE necessary.
3	Notify NMOCD/BLM 48 hours before commencing P&A operations
4	MIRU well service rig and associated P&A equipment
5	Bleed pressure from well to tank (well has very little pressure)
6	Pull Rods laying down
7	ND WH & NU BOP
8	Pull 2-3/8" Tubing (lay down any bad joints)
9	Ensure there is enough 2-3/8" workstring to complete job
10	TIH with 4.5" 11.6# casing scraper to 1250' w/2-3/8" tubing (use new workstring as needed)
11	TOH with 4.5" casing scraper
12	TIH with 4.5" CIBP w/2-3/8" tubing and Set @1165' KB
13	Release from CIBP and pull up hole to 1160' and circulate casing full with fresh water
14	Close Pipe Rams and pressure test casing to 560#
15	NOTE: No CBL required-Cement on record was cemented to surface behind 4-1/2 csg (12-23-02)
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21	with 2-3/8" tbg laying down on trailer. Top off casing with cement.
22	Top off cement in casing
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24	RD and move off location



Serendipity 4

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Sec 26, T26N, R13W, San Juan

County, New Mexico

Field: Basin FC

Zone: Fruitland Coal

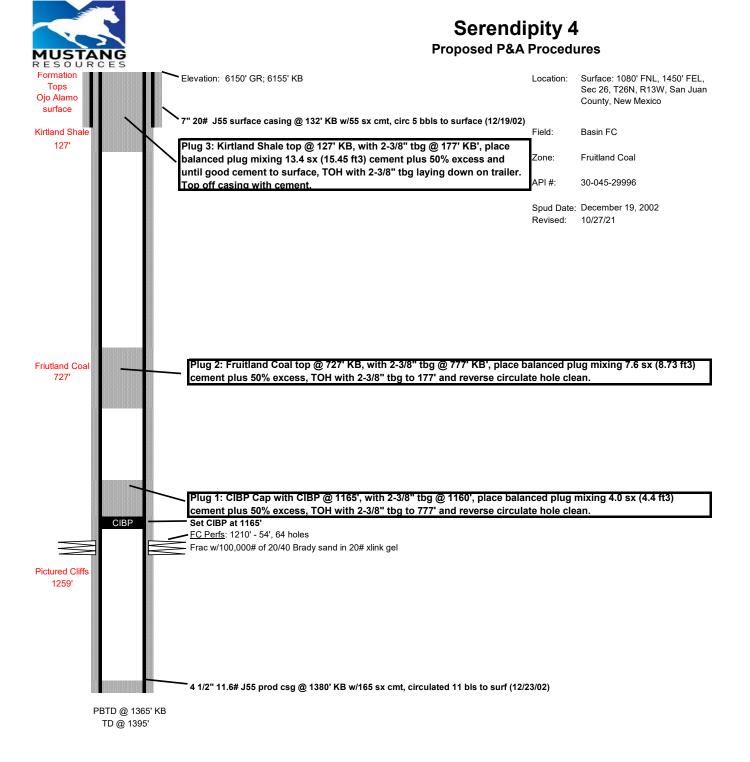
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Spud Date: December 19, 2002

Revised: 8/22/11

5/31/2007 1 1/4" x 12' RHAC pump 49 ea rods 2 ea 4' pony rods 1 ea 6' pony rod 1 x 8' pony rod

TD @ 1395'



P&A Sketch dlj

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

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 66873

CONDITIONS

Operator:	OGRID:
Mustang Resources LLC	373495
1660 Lincoln Street	Action Number:
Denver, CO 80264	66873
	Action Type:
	[C-103] NOI Plug & Abandon (C-103F)

CONDITIONS

Created By	Condition	Condition Date
kpickford	Notify NMOCD 24 Hours Prior to beginning operations	12/16/2021
kpickford	Adhere to BLM approved plugs. See GEO report.	12/16/2021