

Well Name: SERENDIPITY	Well Location: T26N / R13W / SEC 26 / SENW / 36.461783 / -108.189404	County or Parish/State: SAN JUAN / NM
Well Number: 5	Type of Well: OTHER	Allottee or Tribe Name:
Lease Number: NMNM33031	Unit or CA Name: W2, FRCL	Unit or CA Number: NMNM101829
US Well Number: 300453088100S1	Well Status: Gas Well Shut In	Operator: MUSTANG RESOURCES LLC

Notice of Intent

Sundry ID: 2642615

Type of Submission: Notice of Intent	Type of Action: Plug and Abandonment
Date Sundry Submitted: 11/03/2021	Time Sundry Submitted: 07:59
Date proposed operation will begin: 12/09/2021	

Procedure Description: Mustang requests approval to Plug & Abandon the Serendipity 5. 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\_5\_Post\_P\_A\_WBD\_20211103075844.pdf
  - Serendipity\_5\_Cement\_Calculations\_20211103075822.pdf
  - Serendipity\_5\_PxA\_Procedures\_20211103075809.pdf
  - Serendipity\_5\_Current\_WBD\_20211103075758.pdf

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<b>US Well Number:</b> 300453088100S1	<b>Well Status:</b> Gas Well Shut In	<b>Operator:</b> MUSTANG RESOURCES LLC

Conditions of Approval

Additional Reviews

General\_Requirement\_PxA\_20211209140734.pdf  
2642615\_NOIA\_Serendipity\_5\_3004530881\_KR\_12092021\_20211209140722.pdf  
26N13W26FKpc\_Serendipity\_5\_20211209122226.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.

<b>Operator Electronic Signature:</b> DEB LEMON	<b>Signed on:</b> NOV 03, 2021 08:11 AM
<b>Name:</b> MUSTANG RESOURCES LLC	
<b>Title:</b> RegulatoryManager	
<b>Street Address:</b> 1660 Lincoln St., Ste 1450	
<b>City:</b> Denver	<b>State:</b> CO
<b>Phone:</b> (720) 550-7507	
<b>Email address:</b> dlemon@mustangresourcesllc.com	

Field Representative

<b>Representative Name:</b> Don Johnson		
<b>Street Address:</b> 1220 S. Main Avenue		
<b>City:</b> Aztec	<b>State:</b> NM	<b>Zip:</b> 87410
<b>Phone:</b> (505)334-9111		
<b>Email address:</b> djohnson@mustangresourcesllc.com		

BLM Point of Contact

<b>BLM POC Name:</b> KENNETH G RENNICK	<b>BLM POC Title:</b> Petroleum Engineer
<b>BLM POC Phone:</b> 5055647742	<b>BLM POC Email Address:</b> krennick@blm.gov
<b>Disposition:</b> Approved	<b>Disposition Date:</b> 12/09/2021
<b>Signature:</b> Kenneth Rennick	



## Serendipity 5

Location: Surface: 1710' FNL, 2370' FWL,  
Sec 26, T26N, R13W, San Juan  
County, New Mexico

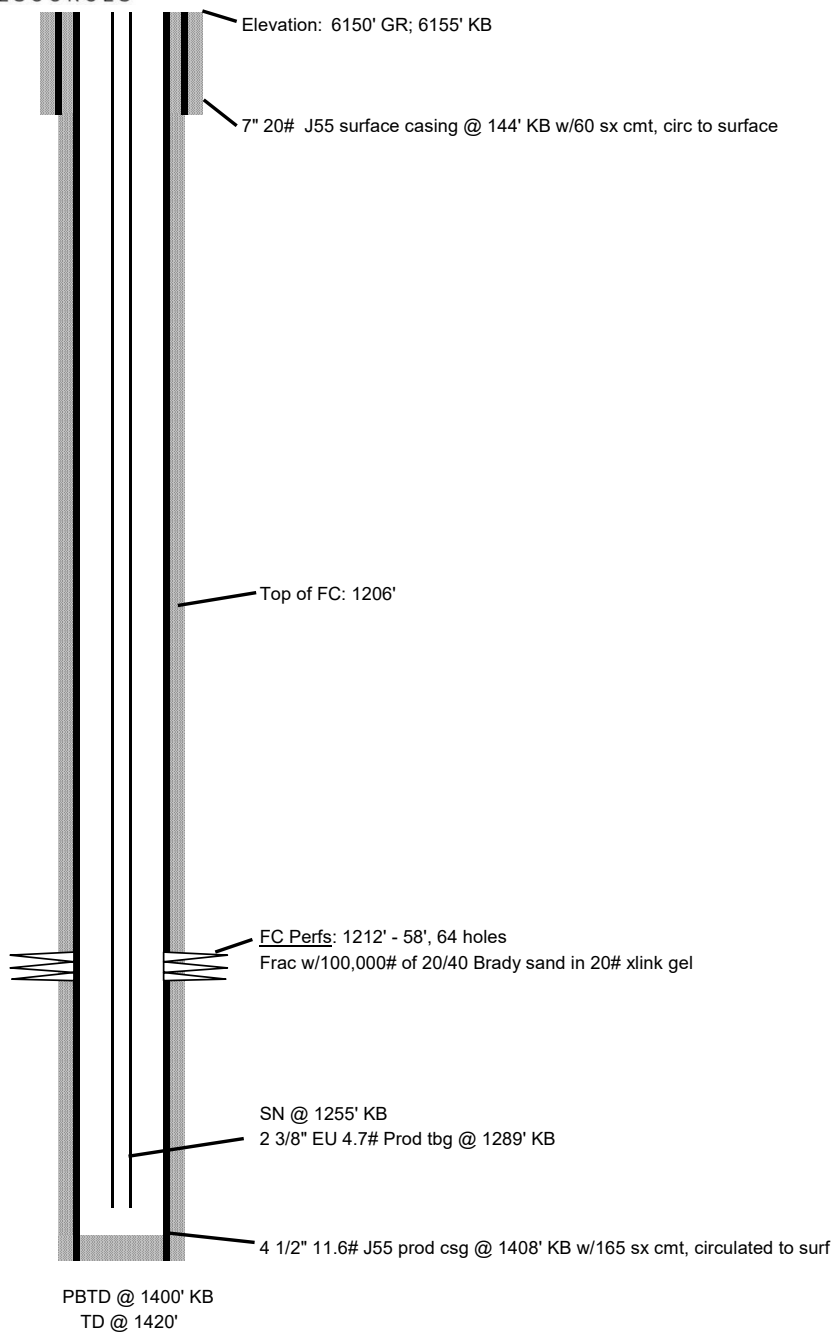
Field: Basin FC

Zone: Fruitland Coal

API #: 30-045-30881

Spud Date: January 2, 2003

Revised: 8/22/11



12/16/2005

1 1/4" x 12' RHAC pump

50 ea 3/4" plain rods

1 ea 16' polish rod

Original Sketch

ljt

**Company Na Mustang Resources LLC****Well Name: Serendipity 5****API Number: 30-045-30881****Location: 1710' FNL, 2370' FWL, Sec 26, T26N, R13W****County: San Juan, NM****Note: Follow all BLM/NMOCD Rules and Regulations.**

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		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 H2O on site  |
| 2  | Prior to rig, verify wellhead connections for any flanges and BOPE necessary.  |
| 3  | <b>Notify NMOCD/BLM 48 hours before commencing P&amp;A operations</b>  |
| 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 @1167' KB   |
| 13 | Release from CIBP and pull up hole to 1162' and circulate casing full with fresh water   |
| 14 | Close Pipe Rams and pressure test casing to 560#   |
| 15 | <b>NOTE:</b> No CBL required-Cement on record was cemented to surface behind 4-1/2 csg (1/5/03)  |
| 16 | If pressure test is good, proceed, if does not pass, must wait a min of 4 hours & tag cmt tops   |
| 17 | <b>Plug 1: CIBP Cap with CIBP @ 1167', with 2-3/8" tbg @ 1162', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 851' and reverse circulate hole clean.</b>  |
| 18 | With tubing @ 851', circulate hole   |
| 19 | <b>Plug 2: Fruitland Coal top @ 801' KB, with 2-3/8" tbg @ 851' KB', place balanced plug mixing 7.6 sx (8.73 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 240' and reverse circulate hole clean.</b>  |
| 20 | With tubing @ 240', circulate hole   |
| 21 | <b>Plug 3: Kirtland Shale top @ 190' KB, with 2-3/8" tbg @ 240' KB', place balanced plug mixing 18.2 sx (20.95 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.</b> |
| 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 5

### Proposed P&A Procedure

Formation  
Tops  
Ojo Alamo  
surface

Elevation: 6150' GR; 6155' KB

Location: Surface: 1710' FNL, 2370' FWL,  
Sec 26, T26N, R13W, San Juan  
County, New Mexico

Kirtland Shale  
190'

7" 20# J55 surface cag @ 144' KB w/60 sx cmt, circ 5 bbls to surface

**Plug 3: Kirtland Shale top @ 190' KB, with 2-3/8" tbg @ 240' KB', place balanced plug mixing 18.2 sx (20.95 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.**

Field: Basin FC

Zone: Fruitland Coal

API #: 30-045-30881

Spud Date: January 2, 2003

Revised: 10/27/21

Fruitland Coal  
801'

**Plug 2: Fruitland Coal top @ 801' KB, with 2-3/8" tbg @ 851' KB', place balanced plug mixing 7.6 sx (8.73 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 240' and reverse circulate hole clean.**

**Plug 1: CIBP Cap with CIBP @ 1167', with 2-3/8" tbg @ 1162', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 851' and reverse circulate hole clean.**  
Set CIBP at 1167'

CIBP

FC Perfs: 1212' - 58', 64 holes

Frac w/100,000# of 20/40 Brady sand in 20# xlink gel

Pictured Cliffs  
1260'

4 1/2" 11.6# J55 prod csg @ 1408' KB w/165 sx cmt, circulated 10 bbls to surf (1/5/03)

PBTD @ 1400' KB  
TD @ 1420'

**Serendipity Com 5****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 1212 ft

CIBP @	1167	Cement Top	1117
Open Hole Capacity (NA-cemented to Surface)			

sxs  
3.7957

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

**Total Sxs Cement 6.09**

Plug 1: CIBP Cap with CIBP @ 1167', with 2-3/8" tbg @ 1162', place balanced plug mixing 4.0 sx (4.4 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 851' and reverse circulate hole clean.

**Plug 2:** Fruitland Coal Formation Top 801 ft

Bttm of Plug @	851	Cement Top	751
Open Hole Capacity (NA-cemented to Surface)			

sxs  
7.6

100	feet plus 50% excess	
Inside Pipe Capacity		
ft3	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 @ 801' KB, with 2-3/8" tbg @ 851' KB', place balanced plug mixing 7.6 sx (8.73 ft3) cement plus 50% excess, TOH with 2-3/8" tbg to 240' and reverse circulate hole clean.

**Plug 3:** Kirtland Shale Formation Top 190 ft

Bttm of Plug @	240	Cement Top	0
Open Hole Capacity (NA-cemented to Surface)			

sxs  
18.2

240	feet plus 50% excess	
Inside Pipe Capacity		
ft3	20.952	100' Inside Casing
ft3	10.476	50% excess
ft3	31.428	Total ft3 Inside Pipe
ft3	32	Rounded up
bbls	5.91	Total BBLS
SXS	27.83	Total Sxs Cement

**Total Sxs Cement 27.83**

Plug 3: Kirtland Shale top @ 190' KB, with 2-3/8" tbg @ 240' KB', place balanced plug mixing 18.2 sx (20.95 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 #5 (API# 30-045-30881)	Location	1710	FNL	&	2370	FWL
Lease No. NMNM-33031	Sec. 26	T26N			R13W	
Operator Mustang Resources, LLC	County	San Juan		State	New Mexico	
Total Depth 1420'	PBTD 1400'	Formation Fruitland coal				
Elevation (GL) 6150'		Elevation (KB) 6155'				

Geologic Formations	Est. Top	Est. Bottom	Log Top	Log Bottom	Remarks
San Jose Fm					
Nacimiento Fm			Surface	85	Surface/freshwater sands
Ojo Alamo Ss			85	190	Aquifer (freshwater)
Kirtland Shale			190	801	
Fruitland Fm			801	1260	Coal/Gas/Possible water
Pictured Cliffs Ss			1260	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.

- Add a plug to cover the Pictured Cliffs top at 1260'.

- 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 1212' – 1258'.

Reference Well:

1) **Formation Tops**  
Same

**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 2642615

Attachment to notice of Intention to Abandon

Well: Serendipity 5

**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 1260 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 minimum general 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.**

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<sub>2</sub>S.

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 5****API Number: 30-045-30881****Location: 1710' FNL, 2370' FWL, Sec 26, T26N, R13W****County: San Juan, NM****Note: Follow all BLM/NMOCD Rules and Regulations.**

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<u>Step</u>	<u>Description</u>
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**Proposed P&A Procedure**

- |    |  |
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County, New Mexico

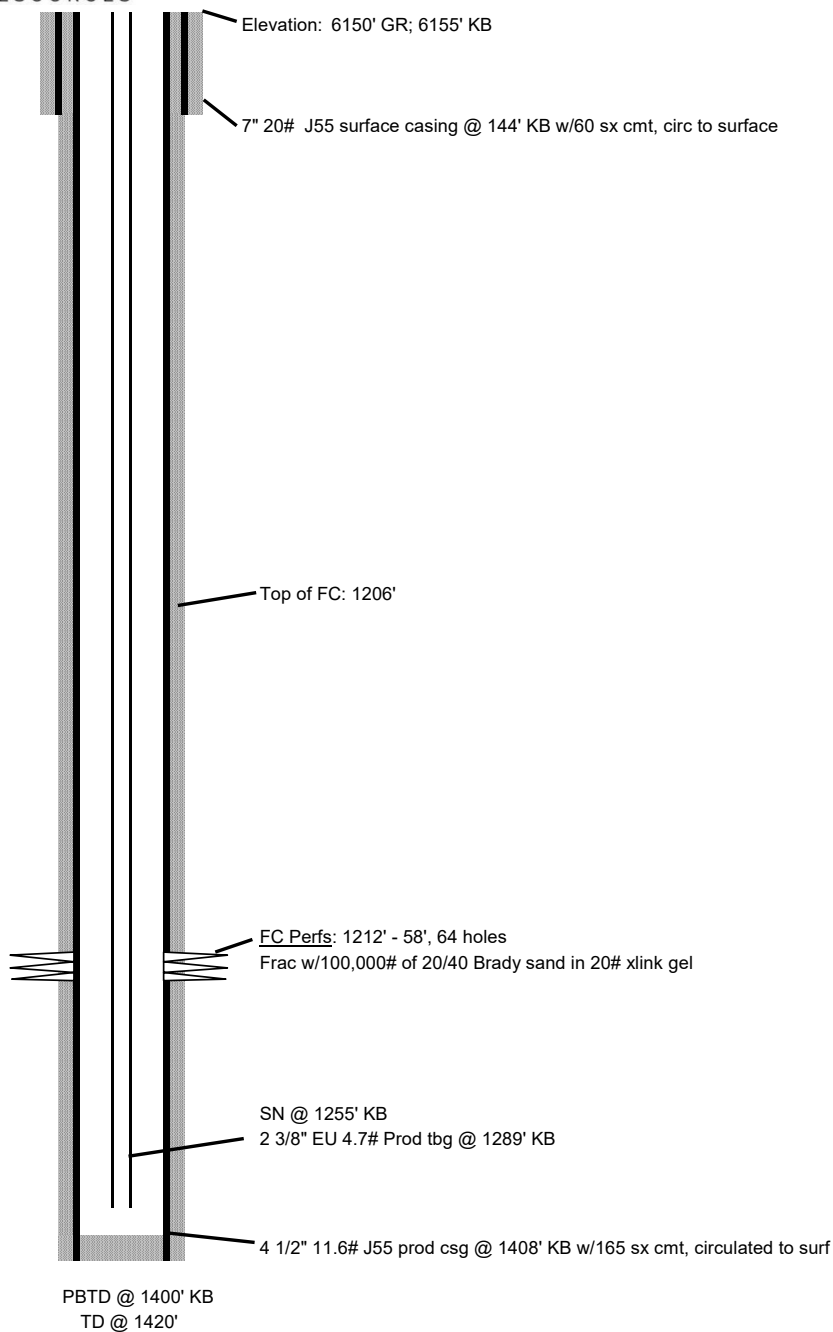
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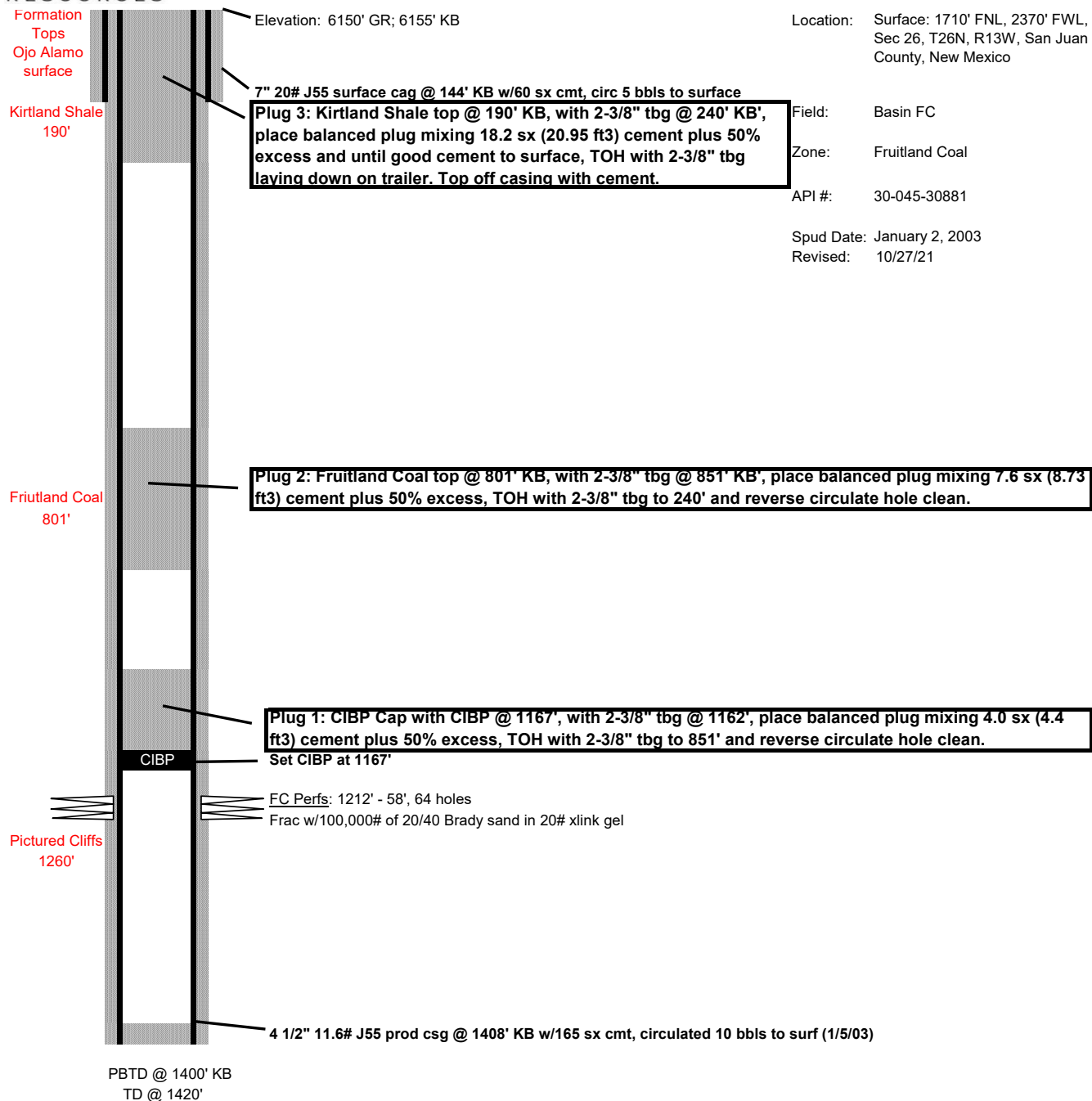
Original Sketch

ljt



## Serendipity 5

### Proposed P&A Procedure



**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 66877

**CONDITIONS**

Operator: Mustang Resources LLC 1660 Lincoln Street Denver, CO 80264	OGRID: 373495
	Action Number: 66877
	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