Form 3160-5
(August 2007)

OCD Hobbs

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
OMB No. 1004-0137
Expires: July 31, 2010

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to re-enter an abandoned well. Use Form 3160-3 (APD) for such proposals.

OCD Hobbs

5. Lease Serial No.
NM-13276, NM129733, NM84651

6. If Indian, Allottee or Tribe Name

SUBMIT IN TRIPLICATE – *Other instructions on page 2.*

7. If Unit of CA/Agreement, Name and/or No.

1. Type of Well

DEC 01 2014

☑ Oil Well ☐ Gas Well ☐ Other

8. Well Name and No.
Hamon Fed Com A #1H

2. Name of Operator
Legacy Reserves Operating L.P.

RECEIVED

9. API Well No.
30-025-41616

3a. Address
PO Box 10848
Midland, TX 79702

3b. Phone No. *(include area code)*
432-689-5200

10. Field and Pool or Exploratory Area
Teas East; Bone Spring

4. Location of Well *(Footage, Sec., T.,R.,M., or Survey Description)*
SHL Sec 18 T20S R34E 200FNL 1010FWL
BHL Sec 7 T20S R34E 330FNL 1980FWL

11. Country or Parish, State
Lea

12. CHECK THE APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION			
☑ Notice of Intent	☐ Acidize	☐ Deepen	☐ Production (Start/Resume)	☐ Water Shut-Off
	☐ Alter Casing	☐ Fracture Treat	☐ Reclamation	☐ Well Integrity
☐ Subsequent Report	☐ Casing Repair	☐ New Construction	☐ Recomplete	☐ Other
	☑ Change Plans	☐ Plug and Abandon	☐ Temporarily Abandon	
☐ Final Abandonment Notice	☐ Convert to Injection	☐ Plug Back	☐ Water Disposal	

13. Describe Proposed or Completed Operation: Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports must be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 must be filed once testing has been completed. Final Abandonment Notices must be filed only after all requirements, including reclamation, have been completed and the operator has determined that the site is ready for final inspection.)

Legacy Reserves Operating proposes to re-enter the existing well bore that had been P&A. The well will be entered and the cement will be dressed to 5350'MD. A whipstock will be set and a window milled in the 9.625" casing at 5350' (50' above he 9.625" casing shoe). The well bore will be directional drilled down to the Bone Spring and the well will be horizontal at a depth of 9500'TVD which is in the First Bone Spring Sand. The well bore will be drilled as per the directional plan attached. At TD casing will be run and cemented as per the casing and cementing sections below. Refer to drilling plan for detailed operations.

PSOA, C102, Support Maps, BOP, Choke Manifold, Closed Loop Documents, Rig Layout, H2S plan, Interim Reclamation Plat, Surface use, Certification Letter will all be the same documents as submitted with the original approved APD.

SEE ATTACHED FOR
CONDITIONS OF APPROVAL

Approval Subject to General Requirements
& Special Stipulations Attached

APPROVED
NOV 20 2014
BUREAU OF LAND MANAGEMENT
CARLSBAD FIELD OFFICE

14. I hereby certify that the foregoing is true and correct.
Name *(Printed/Typed)*
~~Blain Lewis~~ Steve Morris

Title Senior Engineer

Signature

Date 11/13/2014

THIS SPACE FOR FEDERAL OR STATE OFFICE USE

Approved by

Title

Date

Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Office

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.

(Instructions on page 2)

DEC 02 2014

Legacy Reserves Operating
Re-Entry Drilling Prognosis
Hamon Fed Com A #1H

Revision date: November 12, 2014

Surface Location:	575,376.80usft N, 724,528.80usft E 200' FNL, 1010' FWL Section 18, T-20-S, R-34-E Lea County, New Mexico
Bottom Hole:	580,532.95usft N, 725,487.54usft E 330' FNL, 1980' FWL Section 7, T-20-S, R-34-E Lea County, New Mexico
Planned Total Depth:	9500' TVD /14396' MD
RKB: 3662'	GL: 3640'
Preparer:	Steve Morris

Contents

Article I. *General Provisions:*

The approval of the Application For Permit To Drill (APD) is in compliance with all applicable laws and regulations: 43 Code of Federal Regulations 3160, the lease terms, Onshore Oil and Gas Orders, Notices To Lessees, New Mexico Oil Conservation Division (NMOCD) Rules, National Historical Preservation Act As Amended, and instructions and orders of the Authorized Officer. Any request for a variance shall be submitted to the Authorized Officer on Form 3160-5, Sundry Notices and Report on Wells.

Article II. *Permit Expiration*

If the permit terminates prior to drilling and drilling cannot be commenced within 180 days after expiration, an operator is required to submit Form 3106-5, Sundry Notices and Reports on Wells, requesting surface reclamation requirements for any surface disturbance. However, if the operator will be able to initiate drilling within 180 days after the expiration of the permit, the operator must have set the conductor pipe in order to allow for an extension of 180 days beyond the expiration date of the APD. (Filing of a Sundry Notice is required for this 180 day extension.)

Article III. *Plan of Action*

The well will be re-entered and the P&A plugs will be drilled out and dressed to a depth of 5350'MD. This depth is 50' above the 9.625" casing shoe. A whip stock will be set at this depth and a window milled in the 9.625" casing. The well bore will be directional drilled down to the Bone Spring and the well will be horizontal at a depth of 9500'TVD which is in the First Bone Spring Sand. The well bore will be drilled as per the directional plan attached. At TD casing will be run and cemented as per the casing and cementing sections below.

Article IV. *Estimated Formation Tops (geoprognosis with TVD's adjusted to actual KB):*

Formation	TVD	Subsea	Thickness	Type	
Rustler	1680'	-1982'			Already behind casing
Top of Salt	1960'	-1702'			Already behind casing
Base of Salt	3400'	-262'			Already behind casing
Yates	3400'	-262'			Already behind casing
Capitan Reef	3650'	-12'	970'	Water	Already behind casing
Queen	4620'	958'			Already behind casing
Delaware	5666'	2004'	2539'	Hydrocarbon	
Bone Spring	8205'	4543'			
1st Bone Spring Sand	9305'	5643'	554'	Hydrocarbon	

Article V. *Pressure Control:* See COA

A 13-5/8" 5M BOP and 5M choke manifold will be used. See schematics below.
BOP test shall be conducted:

A. when initially installed
B. whenever any seal subject to test pressure is broken
C. following related repairs
D. at 30 day intervals

BOP, choke, kill lines, Kelly cock, inside BOP, etc. will be hydro tested to 250psi(low) and 5,000psi(high). The annular will be tested to 250psi (low) and 2500psi (high).

BOP will be function tested on each trip.

All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 59 Sec. 17

Minimum Working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the 9-5/8 inch intermediate casing show shall be 5000 (5M) psi. 5M system requires an HCR valve, remote kill line ad annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.

The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.
In a water basin, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. The casing cut-off and BOP installation can be initiated four hours after installing the slips, which will be approximately six hours after bumping the plug. For those casing strings not using slips the minimum wait time before cut-off is eight hours after bumping the pug. BOP/BOPE testing can begin after cut-off or once cement reaches 500PSI compressive strength (including lead when specified), whichever is greater. However, if the float does not hold, cut-off cannot be initiated until cement reaches 500 psi compressive strength (including lead when specified).

The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**. The operator also has the option of utilizing an independent tester to test without a plug (i.e. against the casing) pursuant to Onshore Order 2 with the pressure not to exceed 70% of the burst rating for the casing. Any test against the casing must meet the WOC time for water basin (18 hours) or potash (24 hours) or 500 pounds compressive strength, whichever is greater prior to initiating the test (see casing segment as lead cement may be critical item).

a. The results of the test shall be reported to the appropriate BLM office.

b. All Tests are required to be recorded on a calibrated test chart. A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.

c. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug.

See COA

A Co-Flex hose may be used from the BOP to the Choke Manifold. If this is used the manufacture specifications and certifications will be furnished prior to use and be present on location. A variance is requested for the use of the Co-Flex hose. Below are the spec and test certifications.

Continental CONTITECH

Fluid Technology

Quality Document

QUALITY CONTROL INSPECTION AND TEST CERTIFICATE				CERT. N°:	378	
PURCHASER:	ContiTech Beattie Co.			P.O. N°:	004944	
CONTITECH ORDER N°:	498705	HOSE TYPE:	3" ID	Choke and Kill Hose		
HOSE SERIAL N°:	60575	NOMINAL / ACTUAL LENGTH:		9,14 m / 9,14 m		
W.P. 68,9 MPa	10000 psi	T.P. 103,4 MPa	15000 psi	Duration:	60	min.

Pressure test with water at ambient temperature

See attachment. (1 page)

↑ 10 mm = 10 Min.

→ 10 mm = 20 MPa

COUPLINGS Type	Serial N°		Quality	Heat N°
3" coupling with	8925	8930	AISI 4130	B2297A
4 1/16" Swivel Flange end			AISI 4130	31863
Hub			AISI 4130	B2297A

ASSET NUMBER : 66 – 0694

API Spec 16 C

Temperature rate:"B"

All metal parts are flawless

WE CERTIFY THAT THE ABOVE HOSE HAS BEEN MANUFACTURED IN ACCORDANCE WITH THE TERMS OF THE ORDER INSPECTED AND PRESSURE TESTED AS ABOVE WITH SATISFACTORY RESULT.

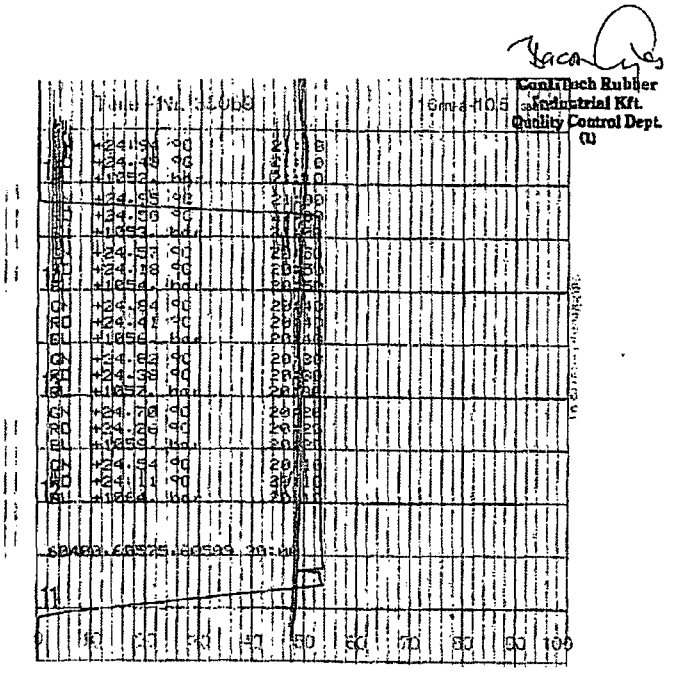
STATEMENT OF CONFORMITY: We hereby certify that the above items/equipment supplied by us are in conformity with the terms, conditions and specifications of the above Purchaser Order and that these items/equipment were fabricated inspected and tested in accordance with the referenced standards, codes and specifications and meet the relevant acceptance criteria and design requirements.

COUNTRY OF ORIGIN HUNGARY/EU

Date:	Inspector	Quality Control
22. March 2011.		ContiTech Rubber Industrial Kft. Quality Control Dept.

ATTACHMENT OF QUALITY CONTROL INSPECTION AND TEST CERTIFICATE *No: 319, 377, 378*

Page: 1 / 1



A variance is requested to use 1502(15,000psi working pressure) hammer unions downstream of the Choke Manifold used to connect the mud/gas separator and panic line. See attached Choke Manifold drawing.

Article VI. *Casing Program (minimum):*

All casing is new API casing.

Hole Size	Casing	Weight lb/ft	Grade	Conn	MD/RKB	
	20"				120'	Existing Casing
16"	13.375"	54.5	J-55	STC	1587'	Existing Casing
12.25"	9.625"	40	J-55	LTC	3964'	Existing Casing
12.25"	9.625"	40	N80	LTC	5400'	Existing Casing
8.5"	5.5"	17	P110	GBCD	14396'	

Size	Collapse psi	SF	Burst psi	SF	Tension Klbs	SF	Max Setting Depth TVD
5.5	7480	1.55	10640	1.29	568	3.06	17000

Article VII. *Cement Program:*

Section 7.01 5.5" Production Casing

Lead: 0 – 9500'

Slurry WT	Yield	Sx	Gallons/ Sack	Excess	Additives
11.9ppg	2.38cuft/sk	1500	13.22	80% in open hole	Class H (50:50) + Poz (Fly Ash) + 10% bwoc Bentonite II + 5% bwow Sodium Chloride + 5 lbs/sack LCM-1 + 0.005 lbs/sack Static Free + 0.005 gps FP-6L

Tail: 9500 - TD

Slurry WT	Yield	Sx	Gallons/ Sack	Excess	Additives
13.2ppg	1.62cuft/sk	1000	9.45	20%	Class H (15:61:11) Poz (Fly Ash):Class H Cement:CSE-2 + 4% bwow Sodium Chloride + 3 lbs/sack LCM-1 + 0.6% bwoc FL-25 + 0.005 gps FP-6L + 0.005% bwoc Static Free

Circulate cement to surface. If cement does not circulate to surface a top squeeze job or casing perforation will be used. As well, a temperature survey or CBL will be performed.
Cement volumes will be adjusted proportionately once actual depth is determined and washout from a fluid caliper.

See COA

Article VIII. *Product Descriptions:*

Bentonite II
P105

CSE-2
An additive which contributes to low density, high compressive strength development of cement slurries at all temperature ranges. This material also controls free water without the need for standard extenders.

Calcium Chloride
A powdered, flaked or pelletized material used to decrease thickening time and increase the rate of strength development.

Cello Flake
Graded (3/8 to 3/4 inch) cellophane flakes used as a lost circulation material.

Class C Cement
Intended for use from surface to 6000 ft., and for conditions requiring high early strength and/or sulfate resistance.

Class H Cement
Class H cement is an API type, all-purpose oil well cement which is used without modification in wells up to 8,000 ft. It possesses a moderate sulfate resistance. With the use of accelerators or retarders, it can be used in a wide range of well depths and temperatures.

FL-25
An all-purpose salt-tolerant fluid loss additive that provides exceptional fluid loss control across a wide range of temperatures and salinity conditions and remedial cementing applications.

FL-52
A water soluble, high molecular weight fluid loss additive used in medium to low density slurries. It is functional from low to high temperature ranges.

FP-6L
A clear liquid that decreases foaming in slurries during mixing.

LCM-1
A graded (8 to 60 mesh) naturally occurring hydrocarbon, asphaltite. It is used as a lost circulation material at low to moderate temperatures and will act as a slurry extender. Cement compressive strength is reduced.

MPA-5
Used to enhanced compressive, tensile, fleural strength development and reduced permeability

Poz (Fly Ash)
A synthetic pozzolan, (primarily Silicon Dioxide). When blended with cement, Pozzolan can be used to create lightweight cement slurries used as either a filler slurry or a sulfate resistant completion cement.

Sodium Chloride
At low concentrations, it is used to protect against clay swelling.

Sodium Metasilicate
An extender used to produce economical, low density cement slurry.

Static Free
An anti-static additive used to prevent air entrainment due to agglomerated particles. Can be used in Cementing and Fracturing operations to aid in the flow of dry materials.

Article IX. Mud Program:

Depth	Hole	Type	MW	PV	YP	WL	pH	Sol %
5350- KOP	8.5"	Cut Brine	8.4-8.6	1-2	1-2	NC	9.5	<1.0
KOP-TD	8.5"	Cut Brine	8.9-9.1	4-6	4-6	18-20	9.5	<3.0

Sufficient mud will be on location to control any abnormal conditions encountered. Such as but not limited to a kick, lost circulation and hole sloughing.

Article X. Mud Monitoring System:
A Pason PVT system will be rigged up prior to spudding the well. A volume monitoring system that measures, calculates, and displays readings from the mud system on the rig to alert the rig crew of impending gas kicks and lost circulation issues.

Components

a) PVT Pit Bull monitor:
Acts as the heart of the system, containing all the controls, switches, and alarms. Typically, it is mounted near the driller's console.

b) Junction box:
Provides a safe, convenient place for making the wiring connections.

c) Mud probes:
Measure the volume of drilling fluid in each individual tank.

d) Flow sensor:
Measures the relative amount of mud flowing in the return line.

Article XI. Logging, Drill stem testing and Coring: See COA
2 man mud logging will start after surface casing has been set.

8.75" hole will have LWD (Gamma Ray) to section TD.

Article XII. Bottom Hole:
Temperature is expected to be 152°F, using a 0.76°/100' gradient. The bottom hole pressure is expected to be 4180psi maximum using a pressure gradient of 0.44psi/ft. With a partially evacuated hole and a gradient of 0.22psi the maximum surface pressure would be 2090psi.

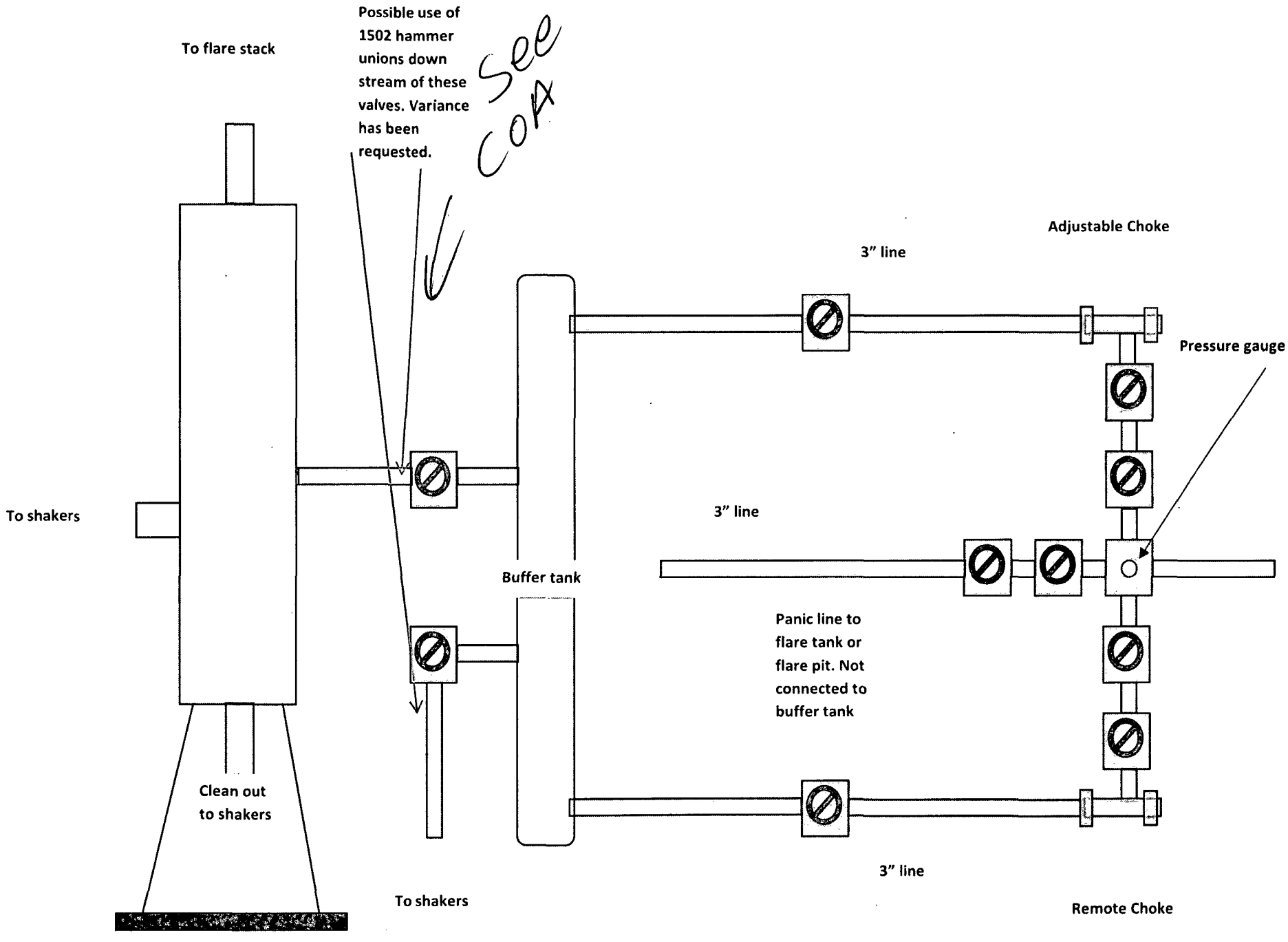
Article XIII. Abnormal Conditions:
Temperature is expected to be normal. All zones are expected to be normal pressure.

Article XIV. H2S:
No H2S is expected. But there is the possibility of the presence of H2S. Attached is the H2S response plan. H2S response plan will be put into effect after surface casing has been set and BOPE has been nippled up.

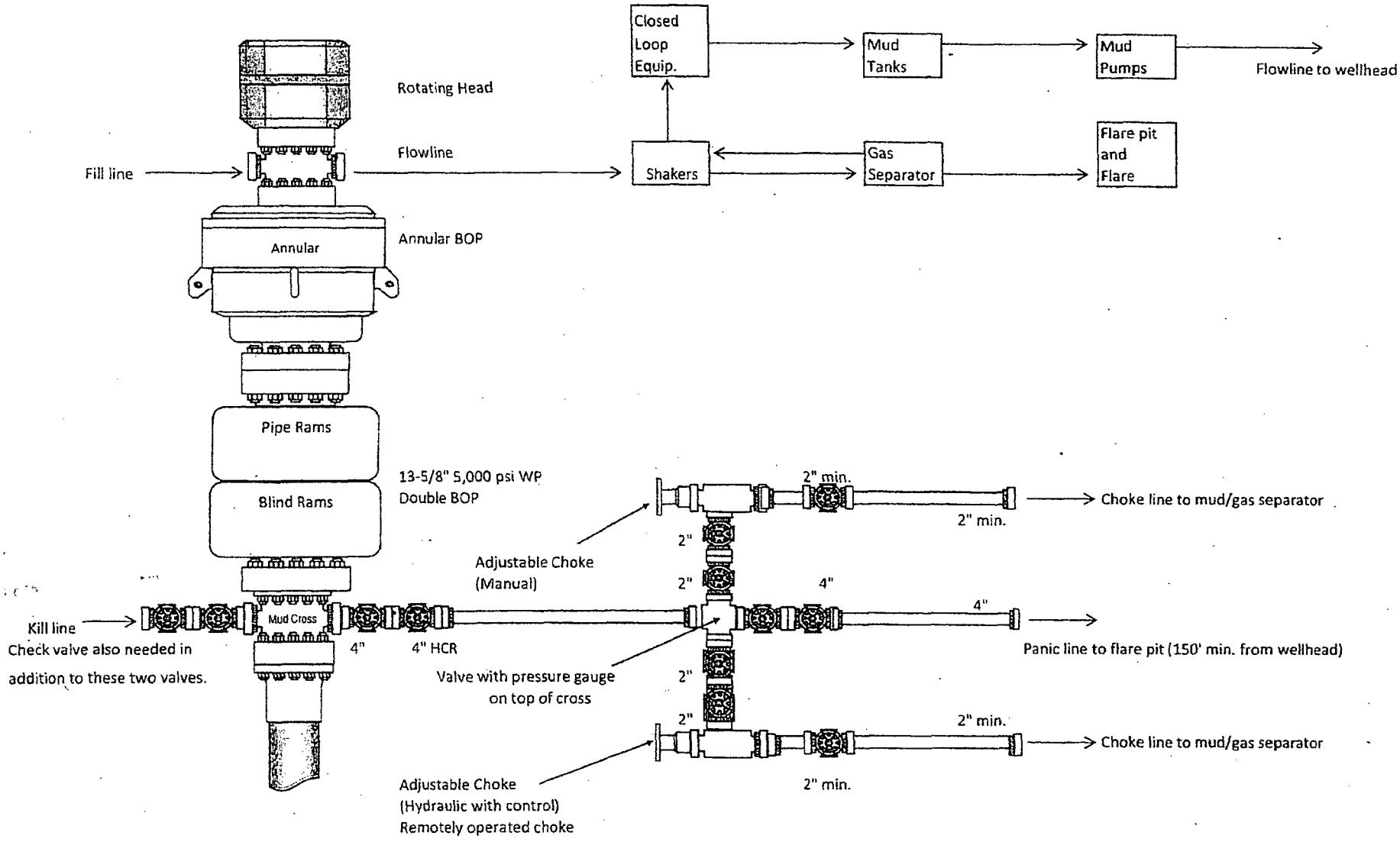
Article XV. Directional:
Directional survey plan and plot attached.

Article XVI. *Drilling Recorder:*

Rig up EDR & PVT prior to spud to record drilling times and other drilling parameters from surface to TD.

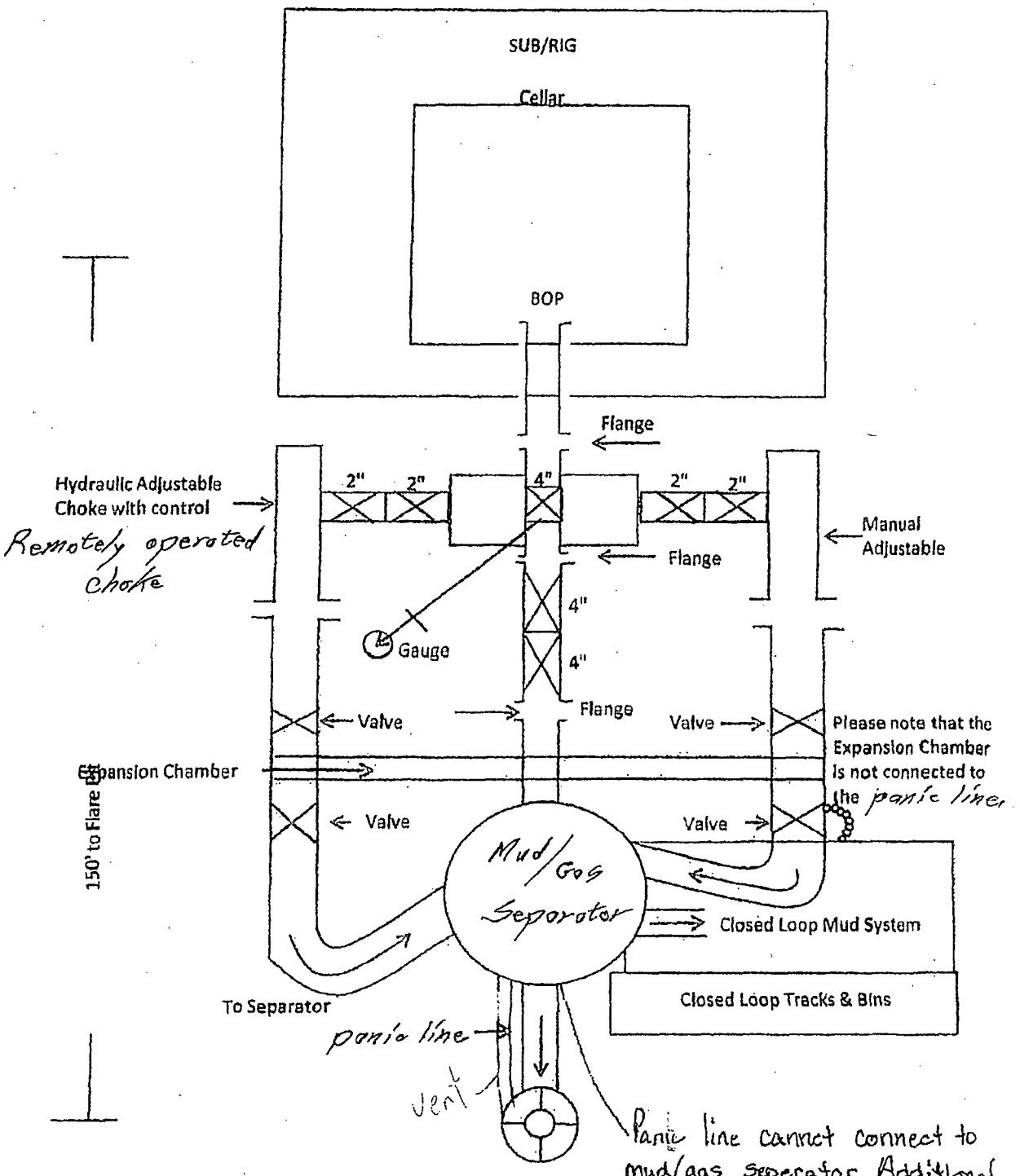

To flare stack
Possible use of 1502 hammer unions down stream of these valves. Variance has been requested.
See COA
Adjustable Choke
3" line
Pressure gauge
To shakers
3" line
Buffer tank
Panic line to flare tank or flare pit. Not connected to buffer tank
Clean out to shakers
To shakers
3" line
Remote Choke

BOP, Choke Manifold and Process Flow Diagrams - Hamon Fed Com A #8H (See Patriot Rig 5 Choke Manifold Equipment Diagram for greater detail)



PATRIOT RIG 5

5M Choke Manifold Equipment



Panic line cannot connect to mud/gas seperator. Additional vent line is needed for mud/gas separator.

LEGACY RESERVES

Legacy Reserves LP

Hamon
Hamon Fed Com A 1H
Hamon Fed Com A 1H Re-Entry

Plan: 141112 Hamon Fed Com A1H Re-Entry

MOJO Standard Plan

12 November, 2014

MOJO DIRECTIONAL CORPORATION

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Project Hamon

Map System:	US State Plane 1927 (Exact solution)	**System Datum:**	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site Hamon Fed Com A 1H

Site Position:		**Northing:**	575,376.80 usft	**Latitude:**	32° 34' 46.931 N
From:	Map	**Easting:**	724,528.80 usft	**Longitude:**	103° 36' 15.910 W
Position Uncertainty:	0.0 usft	**Slot Radius:**	13-3/16 "	**Grid Convergence:**	0.39 °

Well Hamon Fed Com A 1H

Well Position	**+N/-S**	0.0 usft	**Northing:**	575,376.80 usft	**Latitude:**	32° 34' 46.931 N
	+E/-W	0.0 usft	**Easting:**	724,528.80 usft	**Longitude:**	103° 36' 15.910 W
Position Uncertainty		0.0 usft	**Wellhead Elevation:**	usft	**Ground Level:**	3,611.0 usft

Wellbore Hamon Fed Com A 1H Re-Entry

Magnetics	Model Name	Sample Date	Declination (°)	Dip Angle (°)	Field Strength (nT)
	IGRF200510	07/11/2014	7.21	60.46	48,533

Design 141112 Hamon Fed Com A1H Re-Entry

Audit Notes:

Version:		**Phase:**	PLAN	**Tie On Depth:**	0.0

Vertical Section:	Depth From (TVD) (usft)	+N/-S (usft)	+E/-W (usft)	Direction (°)
	0.0	0.0	0.0	10.53

Survey Tool Program Date 12/11/2014

From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description
0.0	14,396.4	141112 Hamon Fed Com A1H Re-Entry (H	MWD	MWD - Standard

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
0.0	0.00	0.00	0.0	-3,634.0	0.0	0.0	0.0	0.00	575,376.80	724,528.80
100.0	0.44	9.40	100.0	-3,534.0	0.4	0.1	0.4	0.44	575,377.18	724,528.86
137.0	0.60	9.40	137.0	-3,497.0	0.7	0.1	0.7	0.44	575,377.51	724,528.92
198.0	0.20	78.10	198.0	-3,436.0	1.0	0.3	1.1	0.92	575,377.84	724,529.07
200.0	0.25	84.76	200.0	-3,434.0	1.0	0.3	1.1	2.93	575,377.85	724,529.08
250.0	1.70	104.70	250.0	-3,384.0	0.9	1.1	1.1	2.93	575,377.67	724,529.91
262.0	1.70	94.40	262.0	-3,372.0	0.8	1.5	1.1	2.54	575,377.61	724,530.26
294.0	2.20	104.20	294.0	-3,340.0	0.6	2.5	1.1	1.87	575,377.42	724,531.33
300.0	2.15	104.22	300.0	-3,334.0	0.6	2.7	1.1	0.90	575,377.37	724,531.55
383.0	1.40	104.70	382.9	-3,251.1	-0.1	5.2	0.9	0.90	575,376.73	724,534.03
400.0	1.31	108.47	399.9	-3,234.1	-0.2	5.6	0.8	0.75	575,376.61	724,534.42
476.0	1.00	132.80	475.9	-3,158.1	-0.9	6.9	0.4	0.75	575,375.89	724,535.73
507.0	0.90	134.40	506.9	-3,127.1	-1.3	7.3	0.1	0.33	575,375.53	724,536.10
572.0	1.30	156.60	571.9	-3,062.1	-2.3	8.0	-0.8	0.89	575,374.50	724,536.76
600.0	1.15	167.04	599.9	-3,034.1	-2.9	8.1	-1.3	0.97	575,373.93	724,536.95
664.0	1.00	199.60	663.9	-2,970.1	-4.0	8.1	-2.5	0.97	575,372.79	724,536.90
700.0	1.00	198.37	699.9	-2,934.1	-4.6	7.9	-3.1	0.06	575,372.19	724,536.70
711.0	1.00	198.00	710.9	-2,923.1	-4.8	7.8	-3.3	0.06	575,372.01	724,536.64
757.0	1.20	205.00	756.9	-2,877.1	-5.6	7.5	-4.1	0.52	575,371.19	724,536.31
800.0	1.47	211.20	799.8	-2,834.2	-6.5	7.0	-5.1	0.72	575,370.31	724,535.84
849.0	1.80	215.90	848.8	-2,785.2	-7.7	6.3	-6.4	0.72	575,369.15	724,535.06
900.0	1.74	218.38	899.8	-2,734.2	-8.9	5.3	-7.8	0.19	575,367.89	724,534.11
941.0	1.70	220.50	940.8	-2,693.2	-9.9	4.5	-8.9	0.19	575,366.94	724,533.32
1,000.0	1.70	219.86	999.8	-2,634.2	-11.2	3.4	-10.4	0.03	575,365.60	724,532.20
1,033.0	1.70	219.50	1,032.7	-2,601.3	-12.0	2.8	-11.2	0.03	575,364.85	724,531.57
1,100.0	1.84	222.40	1,099.7	-2,534.3	-13.5	1.4	-13.0	0.25	575,363.29	724,530.21
1,126.0	1.90	223.40	1,125.7	-2,508.3	-14.1	0.8	-13.7	0.25	575,362.66	724,529.63

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
1,200.0	1.81	233.28	1,199.7	-2,434.3	-15.7	-0.9	-15.6	0.45	575,361.07	724,527.85
1,218.0	1.80	235.80	1,217.6	-2,416.4	-16.1	-1.4	-16.0	0.45	575,360.74	724,527.39
1,300.0	1.35	229.04	1,299.6	-2,334.4	-17.4	-3.2	-17.7	0.59	575,359.38	724,525.59
1,310.0	1.30	227.90	1,309.6	-2,324.4	-17.6	-3.4	-17.9	0.59	575,359.23	724,525.42
1,402.0	1.60	222.20	1,401.6	-2,232.4	-19.2	-5.0	-19.8	0.36	575,357.58	724,523.78
1,500.0	2.00	218.34	1,499.5	-2,134.5	-21.6	-7.0	-22.5	0.43	575,355.22	724,521.80
1,547.0	2.20	217.00	1,546.5	-2,087.5	-22.9	-8.1	-24.0	0.43	575,353.86	724,520.75
1,587.0	2.23	214.12	1,586.5	-2,047.5	-24.2	-8.9	-25.4	0.29	575,352.60	724,519.85
13 3/8"										
1,597.0	2.24	213.41	1,596.5	-2,037.5	-24.5	-9.2	-25.8	0.29	575,352.28	724,519.63
1,600.0	2.24	213.20	1,599.5	-2,034.5	-24.6	-9.2	-25.9	0.29	575,352.18	724,519.57
1,670.0	2.30	208.40	1,669.4	-1,964.6	-27.0	-10.6	-28.5	0.29	575,349.80	724,518.15
1,680.6	2.21	208.02	1,680.0	-1,954.0	-27.4	-10.8	-28.9	0.89	575,349.43	724,517.96
Rustler										
1,687.6	2.15	207.74	1,687.0	-1,947.0	-27.6	-11.0	-29.1	0.89	575,349.20	724,517.83
1,700.0	2.04	207.22	1,699.4	-1,934.6	-28.0	-11.2	-29.6	0.89	575,348.80	724,517.62
1,762.0	1.50	203.50	1,761.4	-1,872.6	-29.7	-12.0	-31.4	0.89	575,347.07	724,516.80
1,800.0	1.25	203.21	1,799.3	-1,834.7	-30.6	-12.4	-32.3	0.65	575,346.23	724,516.43
1,855.0	0.90	202.50	1,854.3	-1,779.7	-31.5	-12.8	-33.3	0.65	575,345.28	724,516.03
1,900.0	1.13	212.50	1,899.3	-1,734.7	-32.2	-13.1	-34.1	0.65	575,344.58	724,515.66
1,947.0	1.40	219.20	1,946.3	-1,687.7	-33.1	-13.8	-35.0	0.65	575,343.74	724,515.04
1,960.7	1.23	217.26	1,960.0	-1,674.0	-33.3	-14.0	-35.3	1.25	575,343.50	724,514.85
Top Salt										
1,967.7	1.15	216.05	1,967.0	-1,667.0	-33.4	-14.0	-35.4	1.25	575,343.38	724,514.76
2,000.0	0.77	207.14	1,999.3	-1,634.7	-33.9	-14.3	-35.9	1.25	575,342.92	724,514.47
2,039.0	0.40	174.60	2,038.3	-1,595.7	-34.2	-14.4	-36.3	1.25	575,342.55	724,514.36
2,100.0	0.91	143.52	2,099.3	-1,534.7	-34.8	-14.1	-36.8	0.99	575,341.95	724,514.67

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
2,131.0	1.20	138.50	2,130.3	-1,503.7	-35.3	-13.8	-37.2	0.99	575,341.51	724,515.03
2,200.0	1.26	123.32	2,199.3	-1,434.7	-36.2	-12.7	-37.9	0.48	575,340.55	724,516.15
2,223.0	1.30	118.70	2,222.3	-1,411.7	-36.5	-12.2	-38.1	0.48	575,340.29	724,516.59
2,300.0	1.62	99.58	2,299.2	-1,334.8	-37.1	-10.4	-38.4	0.75	575,339.69	724,518.42
2,316.0	1.70	96.60	2,315.2	-1,318.8	-37.2	-9.9	-38.4	0.75	575,339.62	724,518.88
2,408.0	2.00	85.00	2,407.2	-1,226.8	-37.2	-7.0	-37.8	0.52	575,339.61	724,521.84
2,500.0	2.10	45.30	2,499.1	-1,134.9	-35.9	-4.2	-36.0	1.52	575,340.93	724,524.63
2,593.0	2.30	23.90	2,592.1	-1,041.9	-33.0	-2.2	-32.8	0.90	575,343.84	724,526.60
2,600.0	2.28	24.84	2,599.1	-1,034.9	-32.7	-2.1	-32.5	0.61	575,344.09	724,526.72
2,685.0	2.10	37.50	2,684.0	-950.0	-29.9	-0.4	-29.5	0.61	575,346.86	724,528.38
2,700.0	2.11	35.86	2,699.0	-935.0	-29.5	-0.1	-29.0	0.41	575,347.30	724,528.70
2,777.0	2.20	27.80	2,775.9	-858.1	-27.0	1.4	-26.3	0.41	575,349.76	724,530.23
2,800.0	2.22	27.02	2,798.9	-835.1	-26.3	1.8	-25.5	0.17	575,350.55	724,530.63
2,831.9	2.26	25.98	2,830.8	-803.2	-25.1	2.4	-24.3	0.17	575,351.67	724,531.19
2,869.0	2.30	24.80	2,867.9	-766.1	-23.8	3.0	-22.8	0.17	575,353.00	724,531.82
2,900.0	2.07	23.85	2,898.8	-735.2	-22.7	3.5	-21.7	0.76	575,354.07	724,532.31
2,962.0	1.60	21.10	2,960.8	-673.2	-20.9	4.3	-19.8	0.76	575,355.90	724,533.07
3,000.0	1.63	26.61	2,998.8	-635.2	-19.9	4.7	-18.7	0.42	575,356.88	724,533.51
3,054.0	1.70	34.00	3,052.8	-581.2	-18.6	5.5	-17.2	0.42	575,358.23	724,534.30
3,100.0	1.55	32.87	3,098.8	-535.2	-17.5	6.2	-16.0	0.33	575,359.32	724,535.02
3,146.0	1.40	31.50	3,144.7	-489.3	-16.5	6.8	-14.9	0.33	575,360.32	724,535.65
3,200.0	1.81	35.72	3,198.7	-435.3	-15.2	7.7	-13.6	0.79	575,361.58	724,536.49
3,238.0	2.10	37.70	3,236.7	-397.3	-14.2	8.5	-12.4	0.79	575,362.62	724,537.27
3,300.0	0.75	110.72	3,298.7	-335.3	-13.4	9.5	-11.5	3.25	575,363.37	724,538.34
3,331.0	1.30	161.30	3,329.7	-304.3	-13.8	9.8	-11.8	3.25	575,362.96	724,538.65
3,401.3	1.06	147.70	3,400.0	-234.0	-15.1	10.5	-13.0	0.52	575,361.66	724,539.25
Bottom Salt										

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
3,408.3	1.04	146.02	3,407.0	-227.0	-15.2	10.5	-13.1	0.52	575,361.55	724,539.32
3,423.0	1.00	142.30	3,421.7	-212.3	-15.5	10.7	-13.2	0.52	575,361.34	724,539.47
3,451.3	1.11	136.02	3,450.0	-184.0	-15.9	11.0	-13.6	0.57	575,360.95	724,539.82
Yates										
3,458.3	1.14	134.66	3,457.0	-177.0	-16.0	11.1	-13.7	0.57	575,360.85	724,539.91
3,500.0	1.33	127.89	3,498.6	-135.4	-16.5	11.8	-14.1	0.57	575,360.26	724,540.59
3,515.0	1.40	125.90	3,513.6	-120.4	-16.8	12.1	-14.3	0.57	575,360.05	724,540.87
3,608.0	1.20	152.60	3,606.6	-27.4	-18.3	13.4	-15.5	0.68	575,358.52	724,542.24
3,651.4	1.66	159.18	3,650.0	16.0	-19.3	13.9	-16.4	1.13	575,357.52	724,542.68
Seven Rivers/Capitan										
3,658.4	1.74	159.91	3,657.0	23.0	-19.5	13.9	-16.6	1.13	575,357.33	724,542.75
3,700.0	2.20	163.20	3,698.6	64.6	-20.8	14.4	-17.8	1.14	575,355.97	724,543.20
3,792.0	1.40	159.90	3,790.5	156.5	-23.6	15.3	-20.4	0.88	575,353.22	724,544.09
3,800.0	1.37	158.90	3,798.5	164.5	-23.8	15.4	-20.5	0.47	575,353.04	724,544.16
3,885.0	1.10	145.30	3,883.5	249.5	-25.4	16.2	-22.0	0.47	575,351.42	724,544.99
3,900.0	0.95	136.47	3,898.5	264.5	-25.6	16.4	-22.2	1.45	575,351.21	724,545.16
3,977.0	0.90	62.00	3,975.5	341.5	-25.8	17.3	-22.2	1.45	575,351.04	724,546.13
4,000.0	1.14	46.15	3,998.5	364.5	-25.5	17.7	-21.9	1.60	575,351.28	724,546.46
4,069.0	2.10	25.60	4,067.5	433.5	-23.9	18.7	-20.1	1.60	575,352.90	724,547.50
4,100.0	1.76	18.96	4,098.4	464.4	-22.9	19.1	-19.1	1.32	575,353.86	724,547.90
4,162.0	1.20	355.10	4,160.4	526.4	-21.4	19.4	-17.5	1.32	575,355.40	724,548.15
4,200.0	1.53	350.03	4,198.4	564.4	-20.5	19.2	-16.6	0.91	575,356.30	724,548.03
4,254.0	2.00	345.70	4,252.4	618.4	-18.9	18.9	-15.1	0.91	575,357.92	724,547.67
4,300.0	1.54	340.57	4,298.4	664.4	-17.5	18.5	-13.8	1.05	575,359.28	724,547.27
4,347.0	1.10	331.00	4,345.4	711.4	-16.5	18.0	-13.0	1.05	575,360.27	724,546.84
4,400.0	1.16	327.12	4,398.3	764.3	-15.6	17.5	-12.2	0.18	575,361.17	724,546.30
4,439.0	1.20	324.50	4,437.3	803.3	-15.0	17.1	-11.6	0.18	575,361.83	724,545.85

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
4,500.0	1.60	327.19	4,498.3	864.3	-13.7	16.2	-10.5	0.66	575,363.06	724,545.02
4,531.0	1.80	328.10	4,529.3	895.3	-13.0	15.7	-9.9	0.66	575,363.84	724,544.53
4,600.0	1.49	340.30	4,598.3	964.3	-11.2	14.9	-8.3	0.68	575,365.60	724,543.66
4,621.7	1.40	345.20	4,620.0	986.0	-10.7	14.7	-7.8	0.68	575,366.12	724,543.49
Queen										
4,623.0	1.40	345.50	4,621.3	987.3	-10.6	14.7	-7.8	0.68	575,366.15	724,543.48
4,628.7	1.39	345.21	4,627.0	993.0	-10.5	14.6	-7.7	0.26	575,366.29	724,543.45
4,700.0	1.23	341.15	4,698.2	1,064.2	-9.0	14.2	-6.2	0.25	575,367.85	724,542.98
4,716.0	1.20	340.10	4,714.2	1,080.2	-8.6	14.1	-5.9	0.25	575,368.17	724,542.87
4,808.0	1.60	341.20	4,806.2	1,172.2	-6.5	13.3	-4.0	0.44	575,370.29	724,542.13
4,900.0	1.49	341.82	4,898.2	1,264.2	-4.2	12.5	-1.8	0.12	575,372.64	724,541.34
5,000.0	1.37	342.60	4,998.2	1,364.2	-1.8	11.8	0.4	0.12	575,375.02	724,540.58
5,100.0	1.25	343.54	5,098.1	1,464.1	0.4	11.1	2.4	0.12	575,377.20	724,539.91
5,200.0	1.13	344.67	5,198.1	1,564.1	2.4	10.5	4.3	0.12	575,379.19	724,539.34
5,300.0	1.01	346.08	5,298.1	1,664.1	4.2	10.1	6.0	0.12	575,381.00	724,538.87
5,350.0	0.95	346.91	5,348.1	1,714.1	5.0	9.9	6.8	0.12	575,381.83	724,538.67
Set Whipstock at 5350ftMD, Mill window at 78deg Azi - 9 5/8"										
5,400.0	1.11	51.33	5,398.1	1,764.1	5.7	10.2	7.5	2.21	575,382.54	724,538.95
5,455.0	2.10	78.00	5,453.1	1,819.1	6.3	11.6	8.3	2.21	575,383.08	724,540.36
Start Nudge to 6Deg@5455ftMD										
5,500.0	2.46	71.26	5,498.0	1,864.0	6.8	13.3	9.1	1.00	575,383.56	724,542.08
5,600.0	3.34	61.82	5,597.9	1,963.9	8.8	17.9	11.9	1.00	575,385.63	724,546.68
5,668.3	3.98	57.85	5,666.0	2,032.0	11.0	21.6	14.8	1.00	575,387.83	724,550.44
Delaware										
5,700.0	4.28	56.40	5,697.7	2,063.7	12.3	23.6	16.4	1.00	575,389.07	724,552.36
5,800.0	5.24	52.94	5,797.3	2,163.3	17.1	30.3	22.3	1.00	575,393.88	724,559.11
5,878.7	6.00	51.00	5,875.7	2,241.7	21.8	36.4	28.1	1.00	575,398.64	724,565.17

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
5,900.0	6.00	51.00	5,896.8	2,262.8	23.2	38.1	29.8	0.00	575,400.04	724,566.90
6,000.0	6.00	51.00	5,996.3	2,362.3	29.8	46.2	37.8	0.00	575,406.61	724,575.02
6,100.0	6.00	51.00	6,095.7	2,461.7	36.4	54.3	45.7	0.00	575,413.19	724,583.15
6,200.0	6.00	51.00	6,195.2	2,561.2	43.0	62.5	53.7	0.00	575,419.77	724,591.27
6,300.0	6.00	51.00	6,294.6	2,660.6	49.5	70.6	61.6	0.00	575,426.35	724,599.39
6,400.0	6.00	51.00	6,394.1	2,760.1	56.1	78.7	69.6	0.00	575,432.93	724,607.52
6,500.0	6.00	51.00	6,493.5	2,859.5	62.7	86.8	77.5	0.00	575,439.51	724,615.64
6,600.0	6.00	51.00	6,593.0	2,959.0	69.3	95.0	85.5	0.00	575,446.08	724,623.76
6,700.0	6.00	51.00	6,692.4	3,058.4	75.9	103.1	93.4	0.00	575,452.66	724,631.89
6,800.0	6.00	51.00	6,791.9	3,157.9	82.4	111.2	101.4	0.00	575,459.24	724,640.01
6,900.0	6.00	51.00	6,891.3	3,257.3	89.0	119.3	109.3	0.00	575,465.82	724,648.13
7,000.0	6.00	51.00	6,990.8	3,356.8	95.6	127.5	117.3	0.00	575,472.40	724,656.26
7,100.0	6.00	51.00	7,090.3	3,456.3	102.2	135.6	125.2	0.00	575,478.97	724,664.38
7,200.0	6.00	51.00	7,189.7	3,555.7	108.8	143.7	133.2	0.00	575,485.55	724,672.50
7,300.0	6.00	51.00	7,289.2	3,655.2	115.3	151.8	141.1	0.00	575,492.13	724,680.63
7,400.0	6.00	51.00	7,388.6	3,754.6	121.9	160.0	149.1	0.00	575,498.71	724,688.75
7,500.0	6.00	51.00	7,488.1	3,854.1	128.5	168.1	157.0	0.00	575,505.29	724,696.87
7,600.0	6.00	51.00	7,587.5	3,953.5	135.1	176.2	165.0	0.00	575,511.87	724,705.00
7,700.0	6.00	51.00	7,687.0	4,053.0	141.6	184.3	173.0	0.00	575,518.44	724,713.12
7,800.0	6.00	51.00	7,786.4	4,152.4	148.2	192.4	180.9	0.00	575,525.02	724,721.24
7,900.0	6.00	51.00	7,885.9	4,251.9	154.8	200.6	188.9	0.00	575,531.60	724,729.37
8,000.0	6.00	51.00	7,985.3	4,351.3	161.4	208.7	196.8	0.00	575,538.18	724,737.49
8,100.0	6.00	51.00	8,084.8	4,450.8	168.0	216.8	204.8	0.00	575,544.76	724,745.61
8,200.0	6.00	51.00	8,184.2	4,550.2	174.5	224.9	212.7	0.00	575,551.33	724,753.74
8,220.9	6.00	51.00	8,205.0	4,571.0	175.9	226.6	214.4	0.00	575,552.71	724,755.43
Bone Spring										
8,300.0	6.00	51.00	8,283.7	4,649.7	181.1	233.1	220.7	0.00	575,557.91	724,761.86

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
8,400.0	6.00	51.00	8,383.1	4,749.1	187.7	241.2	228.6	0.00	575,564.49	724,769.98
8,500.0	6.00	51.00	8,482.6	4,848.6	194.3	249.3	236.6	0.00	575,571.07	724,778.11
8,600.0	6.00	51.00	8,582.0	4,948.0	200.8	257.4	244.5	0.00	575,577.65	724,786.23
8,700.0	6.00	51.00	8,681.5	5,047.5	207.4	265.6	252.5	0.00	575,584.23	724,794.35
8,800.0	6.00	51.00	8,780.9	5,146.9	214.0	273.7	260.4	0.00	575,590.80	724,802.48
8,900.0	6.00	51.00	8,880.4	5,246.4	220.6	281.8	268.4	0.00	575,597.38	724,810.60
8,979.1	6.00	51.00	8,959.1	5,325.1	225.8	288.2	274.7	0.00	575,602.59	724,817.03
KOP@ 8979ftMD										
9,000.0	8.09	51.00	8,979.8	5,345.8	227.4	290.2	276.6	9.99	575,604.20	724,819.02
9,050.0	13.09	51.00	9,028.9	5,394.9	233.2	297.4	283.6	10.00	575,609.98	724,826.16
9,100.0	18.09	51.00	9,077.1	5,443.1	241.6	307.8	293.8	10.00	575,618.43	724,836.60
9,150.0	23.09	51.00	9,123.9	5,489.9	252.7	321.5	307.2	10.00	575,629.49	724,850.26
9,200.0	28.09	51.00	9,169.0	5,535.0	266.3	338.2	323.6	10.00	575,643.08	724,867.03
9,250.0	33.09	51.00	9,212.0	5,578.0	282.3	358.0	343.0	10.00	575,659.09	724,886.80
9,300.0	38.09	51.00	9,252.6	5,618.6	300.6	380.6	365.1	10.00	575,677.39	724,909.41
9,350.0	43.09	51.00	9,290.6	5,656.6	321.1	405.9	389.8	10.00	575,697.86	724,934.68
9,400.0	48.09	51.00	9,325.6	5,691.6	343.5	433.6	417.0	10.00	575,720.33	724,962.43
9,450.0	53.09	51.00	9,357.3	5,723.3	367.8	463.6	446.4	10.00	575,744.63	724,992.44
9,500.0	58.09	51.00	9,385.5	5,751.5	393.8	495.7	477.8	10.00	575,770.58	725,024.49
9,519.1	60.00	51.00	9,395.4	5,761.4	404.1	508.4	490.2	10.00	575,780.90	725,037.22
9,550.0	62.14	48.46	9,410.3	5,776.3	421.6	529.0	511.2	10.00	575,798.37	725,057.84
9,600.0	65.70	44.54	9,432.3	5,798.3	452.5	561.6	547.5	10.00	575,829.29	725,090.39
9,650.0	69.35	40.85	9,451.4	5,817.4	486.4	592.9	586.6	10.00	575,863.25	725,121.69
9,700.0	73.08	37.32	9,467.5	5,833.5	523.2	622.7	628.2	10.00	575,899.99	725,151.51
9,750.0	76.86	33.94	9,480.5	5,846.5	562.4	650.8	671.9	10.00	575,939.23	725,179.62
9,800.0	80.69	30.66	9,490.2	5,856.2	603.9	677.0	717.5	10.00	575,980.68	725,205.81
9,850.0	84.55	27.45	9,496.7	5,862.7	647.2	701.1	764.5	10.00	576,024.01	725,229.88

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
9,900.0	88.42	24.28	9,499.7	5,865.7	692.1	722.8	812.6	10.00	576,068.90	725,251.65
9,920.4	90.00	23.00	9,500.0	5,866.0	710.7	731.0	832.4	10.00	576,087.54	725,259.81
10,000.0	90.00	21.41	9,500.0	5,866.0	784.5	761.1	910.4	2.00	576,161.28	725,289.90
10,100.0	90.00	19.41	9,500.0	5,866.0	878.2	796.0	1,008.9	2.00	576,255.00	725,324.77
10,200.0	90.00	17.41	9,500.0	5,866.0	973.1	827.5	1,108.0	2.00	576,349.88	725,356.35
10,300.0	90.00	15.41	9,500.0	5,866.0	1,069.0	855.8	1,207.4	2.00	576,445.80	725,384.59
10,400.0	90.00	13.41	9,500.0	5,866.0	1,165.9	880.7	1,307.2	2.00	576,542.65	725,409.47
10,500.0	90.00	11.41	9,500.0	5,866.0	1,263.5	902.2	1,407.1	2.00	576,640.31	725,430.95
10,600.0	90.00	9.41	9,500.0	5,866.0	1,361.9	920.2	1,507.1	2.00	576,738.66	725,449.02
10,700.0	90.00	7.41	9,500.0	5,866.0	1,460.8	934.8	1,607.1	2.00	576,837.58	725,463.64
10,800.0	90.00	5.41	9,500.0	5,866.0	1,560.2	946.0	1,706.8	2.00	576,936.96	725,474.80
10,869.5	90.00	4.02	9,500.0	5,866.0	1,629.4	951.7	1,775.9	2.00	577,006.22	725,480.50
Land @ 9920ftMD/9500ftTVD										
10,900.0	90.00	3.41	9,500.0	5,866.0	1,659.9	953.7	1,806.2	2.00	577,036.65	725,482.48
11,000.0	90.00	1.41	9,500.0	5,866.0	1,759.8	957.9	1,905.2	2.00	577,136.56	725,486.68
11,070.4	90.00	0.00	9,500.0	5,866.0	1,830.1	958.7	1,974.5	2.00	577,206.90	725,487.54
11,100.0	90.00	0.00	9,500.0	5,866.0	1,859.8	958.7	2,003.7	0.00	577,236.55	725,487.54
11,200.0	90.00	0.00	9,500.0	5,866.0	1,959.8	958.7	2,102.0	0.00	577,336.55	725,487.54
11,300.0	90.00	0.00	9,500.0	5,866.0	2,059.8	958.7	2,200.3	0.00	577,436.55	725,487.54
11,400.0	90.00	0.00	9,500.0	5,866.0	2,159.8	958.7	2,298.6	0.00	577,536.55	725,487.54
11,500.0	90.00	0.00	9,500.0	5,866.0	2,259.8	958.7	2,396.9	0.00	577,636.55	725,487.54
11,600.0	90.00	0.00	9,500.0	5,866.0	2,359.8	958.7	2,495.3	0.00	577,736.55	725,487.54
11,700.0	90.00	0.00	9,500.0	5,866.0	2,459.8	958.7	2,593.6	0.00	577,836.55	725,487.54
11,800.0	90.00	0.00	9,500.0	5,866.0	2,559.8	958.7	2,691.9	0.00	577,936.55	725,487.54
11,900.0	90.00	0.00	9,500.0	5,866.0	2,659.8	958.7	2,790.2	0.00	578,036.55	725,487.54
12,000.0	90.00	0.00	9,500.0	5,866.0	2,759.8	958.7	2,888.5	0.00	578,136.55	725,487.54
12,100.0	90.00	0.00	9,500.0	5,866.0	2,859.8	958.7	2,986.8	0.00	578,236.55	725,487.54

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Planned Survey

MD (usft)	Inc (°)	Azi (azimuth) (°)	TVD (usft)	TVDSS (usft)	N/S (usft)	E/W (usft)	V. Sec (usft)	DLeg (°/100usft)	Northing (usft)	Easting (usft)
12,200.0	90.00	0.00	9,500.0	5,866.0	2,959.8	958.7	3,085.1	0.00	578,336.55	725,487.54
12,300.0	90.00	0.00	9,500.0	5,866.0	3,059.8	958.7	3,183.5	0.00	578,436.55	725,487.54
12,400.0	90.00	0.00	9,500.0	5,866.0	3,159.8	958.7	3,281.8	0.00	578,536.55	725,487.54
12,500.0	90.00	0.00	9,500.0	5,866.0	3,259.8	958.7	3,380.1	0.00	578,636.55	725,487.54
12,600.0	90.00	0.00	9,500.0	5,866.0	3,359.8	958.7	3,478.4	0.00	578,736.55	725,487.54
12,700.0	90.00	0.00	9,500.0	5,866.0	3,459.8	958.7	3,576.7	0.00	578,836.55	725,487.54
12,800.0	90.00	0.00	9,500.0	5,866.0	3,559.8	958.7	3,675.0	0.00	578,936.55	725,487.54
12,900.0	90.00	0.00	9,500.0	5,866.0	3,659.8	958.7	3,773.3	0.00	579,036.55	725,487.54
13,000.0	90.00	0.00	9,500.0	5,866.0	3,759.8	958.7	3,871.7	0.00	579,136.55	725,487.54
13,100.0	90.00	0.00	9,500.0	5,866.0	3,859.8	958.7	3,970.0	0.00	579,236.55	725,487.54
13,200.0	90.00	0.00	9,500.0	5,866.0	3,959.8	958.7	4,068.3	0.00	579,336.55	725,487.54
13,300.0	90.00	0.00	9,500.0	5,866.0	4,059.8	958.7	4,166.6	0.00	579,436.55	725,487.54
13,400.0	90.00	0.00	9,500.0	5,866.0	4,159.8	958.7	4,264.9	0.00	579,536.55	725,487.54
13,500.0	90.00	0.00	9,500.0	5,866.0	4,259.8	958.7	4,363.2	0.00	579,636.55	725,487.54
13,600.0	90.00	0.00	9,500.0	5,866.0	4,359.8	958.7	4,461.6	0.00	579,736.55	725,487.54
13,700.0	90.00	0.00	9,500.0	5,866.0	4,459.8	958.7	4,559.9	0.00	579,836.55	725,487.54
13,800.0	90.00	0.00	9,500.0	5,866.0	4,559.8	958.7	4,658.2	0.00	579,936.55	725,487.54
13,900.0	90.00	0.00	9,500.0	5,866.0	4,659.8	958.7	4,756.5	0.00	580,036.55	725,487.54
14,000.0	90.00	0.00	9,500.0	5,866.0	4,759.8	958.7	4,854.8	0.00	580,136.55	725,487.54
14,100.0	90.00	0.00	9,500.0	5,866.0	4,859.8	958.7	4,953.1	0.00	580,236.55	725,487.54
14,200.0	90.00	0.00	9,500.0	5,866.0	4,959.8	958.7	5,051.4	0.00	580,336.55	725,487.54
14,300.0	90.00	0.00	9,500.0	5,866.0	5,059.8	958.7	5,149.8	0.00	580,436.55	725,487.54
14,396.0	90.00	0.00	9,500.0	5,866.0	5,155.8	958.7	5,244.1	0.00	580,532.55	725,487.54
TD@14396ftMD										
14,396.4	90.00	0.00	9,500.0	5,866.0	5,156.2	958.7	5,244.5	0.00	580,532.95	725,487.54

Company:	Legacy Reserves LP	**Local Co-ordinate Reference:**	Site Hamon Fed Com A 1H
Project:	Hamon	**TVD Reference:**	NEW KB @ 3634.0usft
Site:	Hamon Fed Com A 1H	**MD Reference:**	NEW KB @ 3634.0usft
Well:	Hamon Fed Com A 1H	**North Reference:**	Grid
Wellbore:	Hamon Fed Com A 1H Re-Entry	**Survey Calculation Method:**	Minimum Curvature
Design:	141112 Hamon Fed Com A1H Re-Entry	**Database:**	EDM 5000.1 Single User Db

Casing Points

Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
5,350.0	5,348.1	9 5/8"	9-5/8	12-1/4
1,587.0	1,586.5	13 3/8"	13-3/8	16

Formations

Measured Depth (usft)	Vertical Depth (usft)	Name	Dip (°)
5,668.3	5,666.0	Delaware	0.00
8,220.9	8,205.0	Bone Spring	0.00
1,680.6	1,680.0	Rustler	0.00
3,651.4	3,650.0	Seven Rivers/Capitan	0.00
3,401.3	3,400.0	Bottom Salt	0.00
3,451.3	3,450.0	Yates	0.00
1,960.7	1,960.0	Top Salt	0.00
4,621.7	4,620.0	Queen	0.00

Plan Annotations

Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates +N/-S (usft)	Local Coordinates +E/-W (usft)	Comment
5,350.0	5,348.1	5.0	9.9	Set Whipstock at 5350ftMD, Mill window at 78deg Azi
5,455.0	5,453.1	6.3	11.6	Start Nudge to 6Deg@5455ftMD
8,979.1	8,959.1	225.8	288.2	KOP@ 8979ftMD
10,869.5	9,500.0	1,629.4	951.7	Land @ 9920ftMD/9500ftTVD
14,396.0	9,500.0	5,155.8	958.7	TD@14396ftMD

Checked By: _____ Approved By: _____ Date: _____

Project:	Hamon
Site:	Hamon Fed Com A 1H
Well:	Hamon Fed Com A 1H
Wellbore:	Hamon Fed Com A 1H Re-Entry
Design:	Hamon Fed Com A1H Re-Entry

LEGACY RESERVES

T G M

Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.81°

Magnetic Field
Strength: 48533.4snT
Dip Angle: 60.46°
Date: 07/11/2014
Model: IGRF200510

PROJECT DETAILS: Hamon

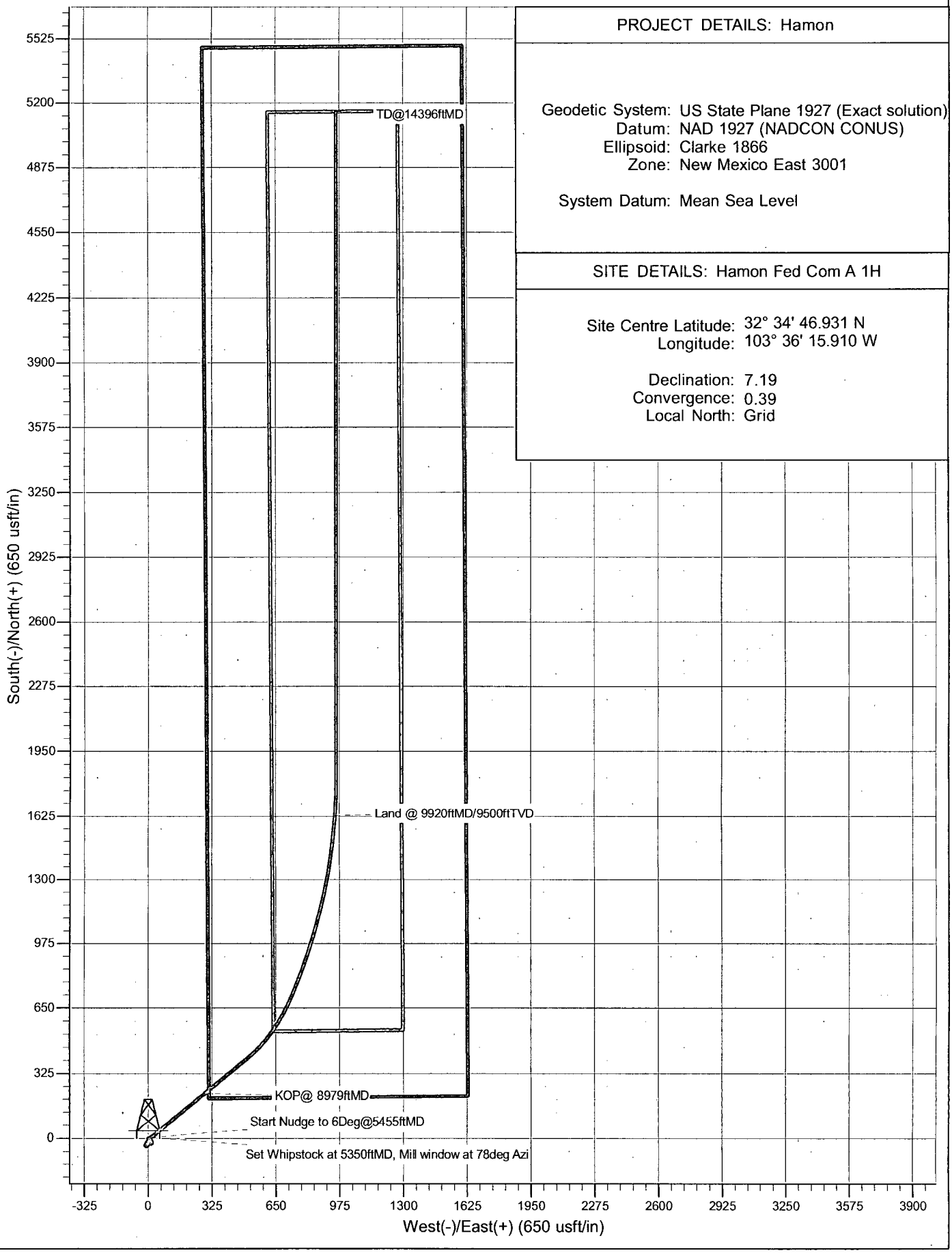
Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001

System Datum: Mean Sea Level

SITE DETAILS: Hamon Fed Com A 1H

Site Centre Latitude: 32° 34' 46.931 N
Longitude: 103° 36' 15.910 W

Declination: 7.19
Convergence: 0.39
Local North: Grid



Project:	Hamon
Site:	Hamon Fed Com A 1H
Well:	Hamon Fed Com A 1H
Wellbore:	Hamon Fed Com A 1H Re-Entry
Design:	Hamon Fed Com A1H Re-Entry

LEGACY RESERVES

Azimuths to Grid North
True North: -0.39°
Magnetic North: 6.81°

Magnetic Field
Strength: 48533.4snT
Dip Angle: 60.46°
Date: 07/11/2014
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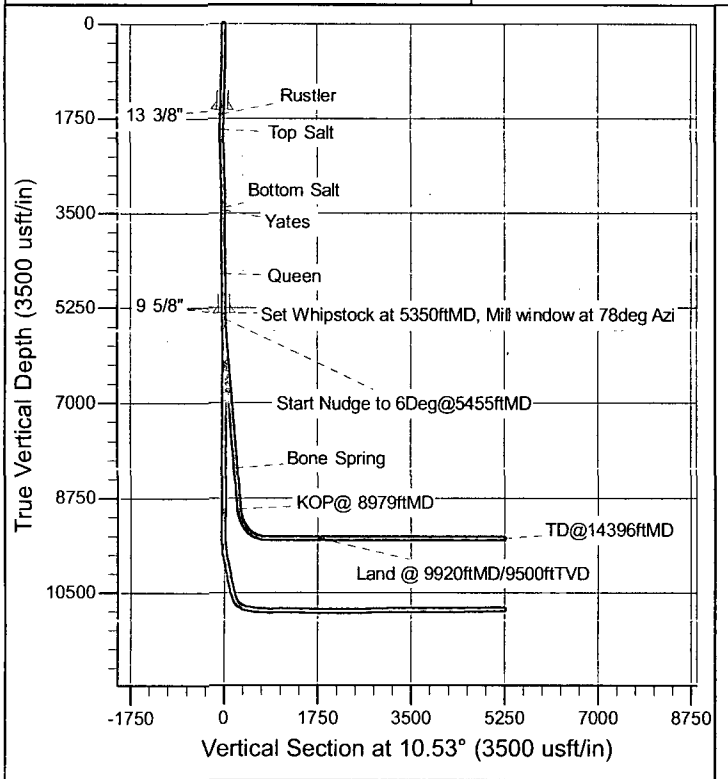
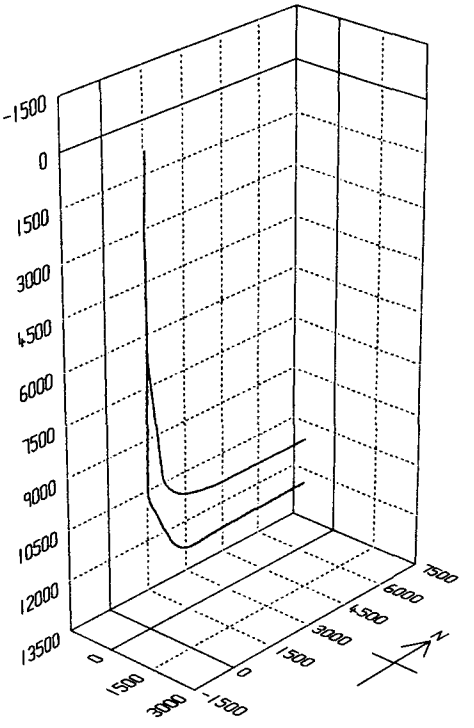


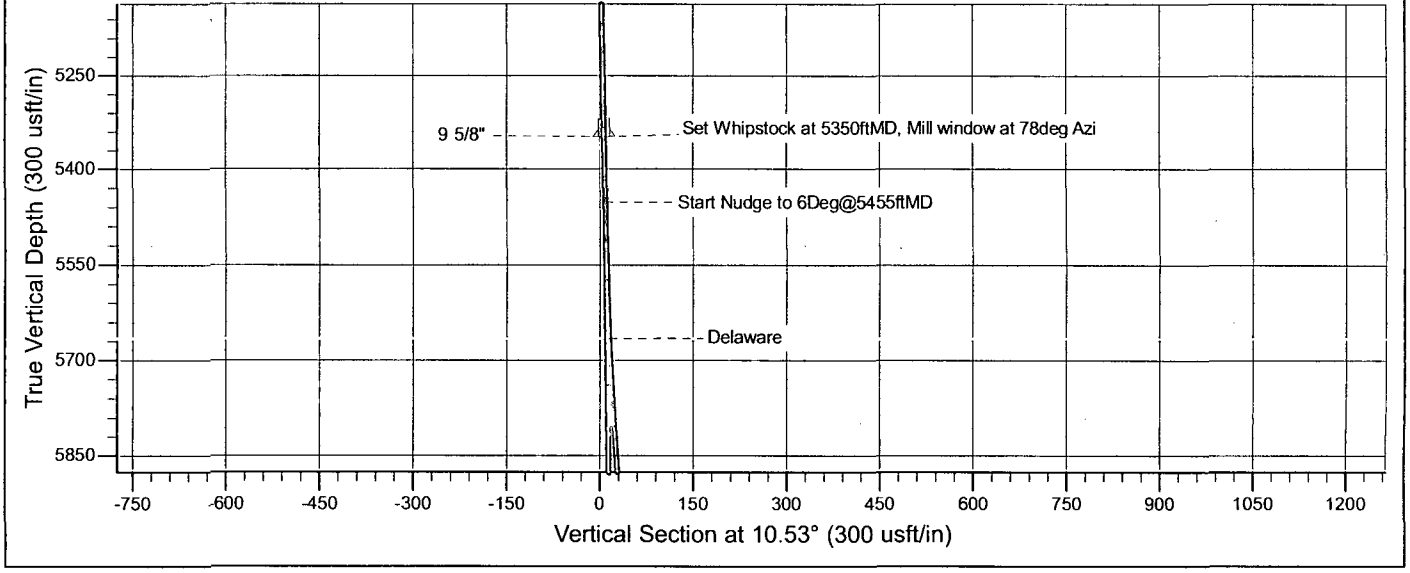


WELL DETAILS: Hamon Fed Com A 1H

+N/-S	+E/-W	Northing	Easting	Latittude	Longitude
0.0	0.0	575376.80	724528.80	32° 34' 46.931 N	103° 36' 15.910 W

ANNOTATIONS

TVD	MD	Inc	Azi	+N/-S	+E/-W	VSect	Departure	Annotation
5348.1	5350.0	0.95	346.91	5.0	9.9	6.8	137.6	Set Whipstock at 5350ftMD
5453.1	5455.0	2.10	78.00	6.3	11.6	8.3	140.0	Start Nudge to 6Deg@5455ftMD
8959.1	8979.1	6.00	51.00	225.8	288.2	274.7	493.6	KOP@ 8979ftMD
9500.0	10869.5	90.00	4.02	1629.4	951.7	1775.9	2108.7	Land @ 9920ftMD/9500ftTVD
9500.0	14396.0	90.00	0.00	5155.8	958.7	5244.1	5635.2	TD@14396ftMD



CONDITIONS OF APPROVAL

Sundry dated 11/13/2014

OPERATOR'S NAME:	**Legacy Reserves Operating, L.P.**
LEASE NO.:	**NMNM-84651**
WELL NAME & NO.:	**Hamon Fed Com A 1H**
SURFACE HOLE FOOTAGE:	**0200' FNL & 1010' FWL**
BOTTOM HOLE FOOTAGE LOCATION:	**0330' FNL & 1980' FWL Sec. 07, T. 20 S., R 34 E., Section 18, T. 20 S., R 34 E., NMPM**
COUNTY:	**Lea County, New Mexico**

A. DRILLING OPERATIONS REQUIREMENTS

A BOP/BOPE test shall be conducted prior to drilling out the temporary abandonment plug with-in the 9-5/8 inch intermediate casing.

The BLM is to be notified in advance for a representative to witness:

a. Spudding well (minimum of 24 hours)
b. Setting and/or Cementing of all casing strings (minimum of 4 hours)
c. BOPE tests (minimum of 4 hours)

☒ **Lea County**
Call the Hobbs Field Station, 414 West Taylor, Hobbs NM 88240,
(575) 393-3612

1. **Hydrogen Sulfide (H2S) monitors shall be installed prior to drilling out the surface shoe and a Hydrogen Sulfide (H2S) Drilling Plan shall be activated 500 feet prior to drilling into the Yates formation. As a result, the Hydrogen Sulfide area must meet Onshore Order 6 requirements, which includes equipment and personnel/public protection items.**

2. Unless the production casing has been run and cemented or the well has been properly plugged, the drilling rig shall not be removed from over the hole without prior approval. **If the drilling rig is removed without approval – an Incident of Non-Compliance will be written and will be a "Major" violation.**

3. Floor controls are required for 3M or Greater systems. These controls will be on the rig floor, unobstructed, readily accessible to the driller and will be operational at all times during drilling and/or completion activities. Rig floor is defined as the area immediately around the rotary table; the area immediately above the substructure on which the draw works is located, this does not include the dog house or stairway area.

4. **The record of the drilling rate along with the GR/N well log run from TD to surface (horizontal well – vertical portion of hole) shall be submitted to the BLM office as well as all other logs run on the borehole 30 days from completion. If available, a digital copy of the logs is to be submitted in addition to the paper copies. The Rustler top and top and bottom of Salt are to be recorded on the Completion Report.**

B. CASING

Changes to the approved APD casing program need prior approval if the items substituted are of lesser grade or different casing size. The Operator can exchange the components of the proposal with that of superior strength (i.e. changing from J-55 to N-80, or from 36# to 40#). Changes to the approved cement program need prior approval if the altered cement plan has less volume or strength or if the changes are substantial (i.e. Multistage tool, ECP, etc.).

Centralizers required on surface casing per Onshore Order 2.III.B.1.f.

Wait on cement (WOC) time prior to drilling out for a primary cement job will be a minimum 18 hours for a water basin, 24 hours in the potash area, or 500 pounds compressive strength, whichever is greater for all casing strings. DURING THIS WOC TIME, NO DRILL PIPE, ETC. SHALL BE RUN IN THE HOLE. Provide compressive strengths including hours to reach required 500 pounds compressive strength prior to cementing each casing string. See individual casing strings for details regarding lead cement slurry requirements.

No pea gravel permitted for remedial or fall back remedial without prior authorization from the BLM engineer.

R-111-P Potash
Capitan Reef
Possibility of water flows in the Artesia Group, Salado, and Delaware.
Possibility of lost circulation in the Red Beds, Rustler, Capitan Reef, and Delaware.
Abnormal pressures may be encountered within the 3rd Bone Spring Sandstone and Wolfcamp.

Existing Casing

1. The **13-3/8** inch surface casing shall be set at approximately **1587** feet; cement circulated to the surface

2. The minimum required fill of cement behind the **9-5/8** inch intermediate casing, which shall be set at approximately **5400** feet, is: DV Tool set at 3925' cement circulated to the surface

NEW Casing
Centralizers required on horizontal leg, must be type for horizontal service and a minimum of one every other joint.

3. The minimum required fill of cement behind the **5-1/2** inch production casing is:

   ☒ Cement to surface. If cement does not circulate, contact the appropriate BLM office.

4. If hardband drill pipe is rotated inside casing, returns will be monitored for metal. If metal is found in samples, drill pipe will be pulled and rubber protectors which have a larger diameter than the tool joints of the drill pipe will be installed prior to continuing drilling operations.

5. Whenever a casing string is cemented in the R-111-P potash area, the NMOCD requirements shall be followed.

C. PRESSURE CONTROL

A BOP/BOPE test shall be conducted prior to drilling out the temporary abandonment plug with-in the 9-5/8 inch intermediate casing.

1. All blowout preventer (BOP) and related equipment (BOPE) shall comply with well control requirements as described in Onshore Oil and Gas Order No. 2 and API RP 53 Sec. 17.

2. **Variance approved for operator to use 1502 (15,000 psi) hammer unions downstream of the choke manifold to connect to the mud/gas separator. These hammer unions must be no higher than 3-4 feet above ground level and the stamped 1502 must be visible for the inspector to check. No substitutions for the 1502 will be approved. Operator may be required to show manufacturer data for the 1502.**

3. Variance approved to use flex line from BOP to choke manifold. Check condition of flexible line from BOP to choke manifold, replace if exterior is damaged or if line fails test. Line to be as straight as possible with no hard bends and is to be anchored according to Manufacturer's requirements. The flexible hose can be exchanged with a hose of equal size and equal or greater pressure rating. **Anchor requirements, specification sheet and hydrostatic pressure test certification matching the hose in service, to be onsite for review. These documents shall be posted in the company man's trailer and on the rig floor.** If the BLM inspector questions the straightness of the hose, a BLM engineer will be contacted and will review in the field or via picture supplied by inspector to determine if changes are required (operator shall expect delays if this occurs).

4. Minimum working pressure of the blowout preventer (BOP) and related equipment (BOPE) required for drilling below the **9-5/8** inch intermediate casing shoe shall be **5000 (5M)** psi. **5M system requires an HCR valve, remote kill line and annular to match. The remote kill line is to be installed prior to testing the system and tested to stack pressure.**

5. The appropriate BLM office shall be notified a minimum of 4 hours in advance for a representative to witness the tests.

   a. In potash areas, for all casing strings utilizing slips, these are to be set as soon as the crew and rig are ready and any fallback cement remediation has been done. For all casing strings, casing cut-off and BOP installation can be initiated at twelve hours after bumping the plug. However, **no tests** shall commence until the cement has had a minimum of 24 hours setup time.

   b. The tests shall be done by an independent service company utilizing a test plug **not a cup or J-packer**.

   c. The test shall be run on a 5000 psi chart for a 2-3M BOP/BOP, on a 10000 psi chart for a 5M BOP/BOPE and on a 15000 psi chart for a 10M BOP/BOPE. If a linear chart is used, it shall be a one hour chart. A circular chart shall have a maximum 2 hour clock.

   d. The results of the test shall be reported to the appropriate BLM office.

   e. All tests are required to be recorded on a calibrated test chart. **A copy of the BOP/BOPE test chart and a copy of independent service company test will be submitted to the appropriate BLM office.**

   f. The BOP/BOPE test shall include a low pressure test from 250 to 300 psi. The test will be held for a minimum of 10 minutes if test is done with a test plug and 30 minutes without a test plug. This test shall be performed prior to the test at full stack pressure.

D. DRILL STEM TEST

If drill stem tests are performed, Onshore Order 2.III.D shall be followed.

E. WASTE MATERIAL AND FLUIDS

All waste (i.e. drilling fluids, trash, salts, chemicals, sewage, gray water, etc.) created as a result of drilling operations and completion operations shall be safely contained and disposed of properly at a waste disposal facility. No waste material or fluid shall be disposed of on the well location or surrounding area.

Porto-johns and trash containers will be on-location during fracturing operations or any other crew-intensive operations.