IDAHO DEPARTMENT OF LANDS
DIRECTOR'S OFFICE
300 N 6th Street Suite 103
PO Box 83720
Boise ID 83720-0050
Phone (208) 334-0200
Fax (208) 334-5342

IDAHO DEPARTMENT OF LANDS

TOM SCHULTZ, DIRECTOR
SECRETARY TO THE COMMISSION

IDAHO OIL AND GAS
CONSERVATION COMMISSION
Chris Beck, Chairman
Margaret Chipman, Vice-Chairman
Sid Cellan
James Classen
Ken Smith

November 24, 2015

Ronda Louderman
Senior Regulatory Specialist
15021 Katy Frwy., Suite 400
Houston, TX 77094

SUBJECT: Permit to Drill #11-075-20029, ML Investments 2-3

The Idaho Department of Lands has completed our review of this permit to drill for gas. Enclosed is a copy of the approved permit. This permit was approved with the following stipulations:

1. The permittee shall be required to submit an affidavit covering the initial BOP pressure test after installation signed by the operator or contractor attesting to the satisfactory pressure test.

2. The permittee shall ensure tanks are adequately sized, designed and constructed for the reception and confinement of mud and cuttings and to prevent contamination of streams and potable water.

3. Drilled holes cannot be used for any other purposes unless they are constructed according to the applicable well construction standards administered by the Idaho Department of Water Resources.

4. Applicant will obtain any needed water rights from Idaho Department of Water Resources if nearby wells will be used to supply water for the drilling operations.

5. All well information required by IDAPA 20.07.02.340 and 341 will be submitted to IDL within 30 days of the well completion or the logs being run.

6. Well Log information shall be submitted in paper and electronic formats

7. A Caliper Log will be run in addition to the logs listed on Page 11 of the Permit Supplement.

8. Idaho Department of Lands inspectors shall have 24 hour, unencumbered access for compliance and regulatory purposes.

9. All cementing operations shall be in accordance with IDAPA 20.07.02.310. Cement will be returned to surface on all string via the pump and plug method or other method as approved by the Department.

10. This permit does not grant the right for ingress or egress nor does this application grant the right to production from unleased lands.

11. No production or drainage may occur until item 9 above has been met or the Commission has issued an order to satisfy item 9.

Please ensure that all operations are conducted in accordance with the requirements of IDAPA 20.07.02 (Rules Governing Conservation of Oil and Natural Gas in the State of Idaho).

This permit will be administered by myself and a contractor hired by IDL. We will be inspecting the drilling operation. Please contact me at 208-334-0261 if you have any questions.

Sincerely,

Eric Wilson
Resource Protection and Assistance Bureau Chief

cc: AJ Mondor, Resource Specialist, IDL Southwest Office
Chad Hersley, IDWR, PO Box 83720, Boise, Idaho 83720-0098
Patti Nitz, Payette County, 1130 3rd Ave. N., Payette, ID 83661

ALTA MESA SERVICES, LP
15021 Katy Freeway, Suite 400
Houston, Texas 77094
(281) 530-0991
(281) 530-5278 FAX

DEPT. OF LANDS
2015 OCT 23 PM 4:08
BOISE, IDAHO

October 22, 2015

Mr. Paul Lowrey/Mr. Eric Wilson
Oil and Gas Program Manager/Bureau Chief
Idaho Department of Lands
300 N. 6th Street, Suite 103
Boise, ID 83720

Dear Mr. Lowrey & Mr. Wilson:

Re: Notice of Incomplete Application Letter Dated October 20, 2015

Attached, please find a completed application to Drill ML Investments 2-3 in Payette County, Idaho. In lieu of sending you specific sheets of paper to replace with the previously filed application, we are now submitting the entire package again. You may discard the previous package, however we request that you be conscientious to shred the documents since we claim confidentiality rights for the submitted documentation. If you are unable to shred them, I will be happy to provide a pre-paid federal express envelope for you to return them to me.

With the last submittal, we acknowledge that there were some items inadvertently left out of the application. Included in the new package attached, you will find the following documents have been added in order to meet your guidelines:

1. The casing stipulated on Page 14 and Page 15 has now been amended to match and correctly reflect that the casing will be 5 ½";
2. The complete wellhead system diagram on Page 22 has been replaced with bigger font so that all the information is more legible;
3. A subsurface map showing the fault has been included;
4. Our federal exemptions are provided to indicate that we and governmental agencies have affirmative duties to protect critical energy infrastructure information from possible terroristic threats and to ensure public safety. Therefore, we contend that this should be considered by the state in terms of state protection as well.
5. A map and information obtained from the IDWR is included to specify the nearest structure with water supply or nearest water well to the proposed ML Investments 2-3 drilling location.

Thank you for your time in considering this application, and if you need further information, please feel free to contact me.

Sincerely,

Ronda Louderman

Ronda Louderman
Regulatory Coordinator

ALTA MESA SERVICES, LP
15021 Katy Freeway, Suite 400
Houston, Texas 77094
(281) 530-0991
(281) 530-5278 FAX

Dear Idaho Department of Land,

Alta Mesa Services (AMS) is submitting to you, required plans, procedures and projected well drilling information. It is AMS's request that you protect these documents from disclosure. The submitted documents do contain security sensitive information (SSI) regarding critical energy infrastructure controlled under 49 CFR §1520.5, accordingly, preservation of confidential treatment, and withholding these documents from any relevant FOIA request is requested.

SSI contained in the submitted documents includes but is not limited to the following:

- Project specifications and procedures
- Identification of wells, flowlines and high consequence areas (HCA's)
- Employee and personnel private information

In accordance with the Freedom of Information Act and 49 CFR Part 15, you are obligated to withhold any information requested under FOIA that meets the criteria of Exemption 3.

Exemption 3 allows the withholding of information prohibited from disclosure by another federal statute provided that one of two disjunctive requirements are met: the statute either "(A) requires that the matters be withheld from the public in such a manner as to leave no discretion on the issue, or (B) establishes particular criteria for withholding or refers to particular types of matters to be withheld." Records and information determined to be SSI under 49 CFR Part 15 are specifically exempt from public disclosure under FOIA pursuant to 5 U.S.C. 552(b)(3).

The applicability of Exemption 3 does not depend upon the contents of the documents, because it is the nature of the documents, not their content that makes them exempt. The agency need only show that the documents are within the category of documents specifically exempt from disclosure by the statute. (See *O'Connor v. U.S. Dept. of Treasury*, 570 F.Supp.2d 749, 755 (2008))

49 CFR Part 15 provides for disclosure of non-SSI information that may be contained in a record containing SSI only if such non-SSI information is not otherwise exempt. Alta Mesa Services asserts that any information contained in the submitted documents that is determined not to meet the criteria of SSI under Part 15 squarely falls under FOIA Exemption 4.

Exemption 4 prohibits the disclosure of trade secrets and commercial or financial information obtained from a person and privileged or confidential. In the engineering plan and subsequent report, Alta Mesa Services voluntarily provides Idaho Department of Land with detailed information about its operations and staffing that it would not customarily release to the public. These documents will contain confidential business information including but not limited to the following:

- Operations and staffing
- Well drilling prognosis
- Construction and location identification
- Design specifications
- Surveys and mapping
- Detailed well and drilling data
- Emergency response activities

Release of this proprietary information would substantially harm Alta Mesa Services competitive position because its competitors could use this information to their advantage in adjusting their techniques and operations – the type of affirmative use of proprietary information against which Exemption 4 is meant to guard. (See United Technologies Corp. v. U.S. Dept. of Defense, 601 F.3d 557, 390 (D.C. Cir. 2010) acknowledging information contained in quality control reports could be used by competitors to gain valuable insights from which to gain advantage.)

Additionally, AMS strongly feels that all information contained in this drilling application meets exemptions from public information disclosure through Idaho code sections 74-107 and 74-108. This applies especially to any and all documents containing geologic data.

If you have any questions or would like to discuss this matter, please feel free to contact me at (361) 960-5671.

Sincerely,

ALTA MESA SERVICES, LP

Ronda Louderman

Ronda Louderman
Senior Regulatory Specialist

IDAHO OIL AND GAS CONSERVATION COMMISSION

Application For Permit to Drill, Deepen or Plug Back

APPLICATION TO: Drill ($2,000) ☒ Deepen ($500) ☐ Plug Back ($500) ☐

NAME OF OPERATOR: Alta Mesa Services, LP Date: 10/24/2015

Address: 15021 Katy Freeway, Suite 400

City: Houston State: TX Zip Code: 77094 Telephone: 281-530-0991

Contact Name: Ronda Louderman Email Address: rlouderman@altamesa.net

Emergency Contact Name/Phone: Wade Moore, 832-248-9390

DESCRIPTION OF WELL AND LEASE

Name of Lease: ML Investments Well Number: 2-3 Elevation (ground): GL 2,635 ft

Well Location: Section: 3 Township: 8N Range: 4W (or block and survey) _____

(Give footage from Section lines): 1,367'

Latitude/Longitude (Dec Degrees): BH 44 03'35.376" /116 48'22.054" Datum: _____ WGS84 _____ NAD83

X _____ NAD27

Field and Reservoir (if wildcat, so state): Willow County: Payette

Distance, in miles, and direction from nearest town or post office: 6.69 miles direct East of Payette City Hall

Nearest distance from proposed location to property or lease line: 1,367' feet

Distance from proposed location to nearest drilling, completed or applied for on the same lease: 925 feet

Proposed depth: 5,000 Approx date work will start: 11/16/2015 Number of acres in lease(s): 640

Number of wells on lease, including this well, completed in or drilling to this reservoir: 2

If lease purchased with one or more wells drilled, complete the following information:

Purchased from (Name): N/A

Address of above: _____

Bond Type and Number: _____

Surface Rights Owner (At proposed surface location): Name DJS Properties Phone: 208-321-0357

Does the drilling unit contain state leases? [1] If yes, check all that apply:

IDL ☐ IDFG ☐ IDT ☐ Public Trust ☐ Other ☐

Does this application include the following actions? If yes, check all that apply:

Well Treatment ☐ Pit construction ☐ Directional or Horizontal Drilling ☒

Applications that include well treatments, pit construction, and directional drilling must provide attachments with the information required from the respective sections of IDAPA 20.07.02. If these activities are not included in this application, then a separate application and approval will be required prior to commencement of any of these activities.

Remarks: (If this is an application to deepen or plug back, briefly describe work to be done, giving present producing zone and expected new producing zone) N/A

BOISE, IDAHO
2015 OCT 28 AM 11:09
DEPT. OF LANDS

IDAHO OIL AND GAS CONSERVATION COMMISSION

Application For Permit to Drill, Deepen or Plug Back

Applicant(s) should be familiar with and adhere to IDAPA 20.07.02, Rules Governing Conservation of Crude Oil and Natural Gas in the State of Idaho.

Please check the boxes below to indicate that you have supplied the required information.

Maps Required

- Attach a survey plat or map, preferably on a scale of one (1) inch equals one thousand (1,000) feet, prepared by a licensed surveyor or engineer.
- The plat must show:

☒ The proposed well location. For directional wells, both surface and bottomhole locations should be marked.
☒ The location of the well with reference to the nearest lines of an established public survey.
☒ All leased tracts held by the applicant within the drilling unit. Distances of the proposed well from the two nearest unit boundary lines, if applicable, and from the nearest oil or gas wells on the same unit completed in or being drilled to the same reservoir. If the well location requested is not in conformance with the applicable well-spacing rules, show all off-setting wells to the proposed well, and the names and addresses of all adjoining lease or property owners.
☒ The location of the nearest structure with a water supply, or the nearest water well as shown on the IDWR registry of water rights or well log database.

Other Required Information

☒ Estimated depth to the top of the important geologic markers
☒ Estimated depth to the top of the target formations.
☒ Information on the type of tools to be used.
☒ Proposed logging program.
☒ Proposed casing program, including size and weight of casing and the depth at which each casing type is to be set.
☒ Type and amount of cement to be used, and the intervals cemented.
☒ Information on the drilling plan (drill pad and rig set up, etc).
☒ Schematic diagram of the BOP and well head assemblies, including the minimum size and pressure rating of all components of the BOP and well head assemblies.
☒ Best management practices to be used for erosion and sediment control.
☒ Plan for interim reclamation of the drill site after the well is completed, and a plan for final reclamation of the drill site following plugging and abandonment of the well. These plans must contain the information needed to implement reclamation as described in IDAPA 20.07.02 subsection 310.16 and section 510.

CERTIFICATION: I, Ronda Louderman the undersigned, state that I am the Sr. Regulatory Specialist of Alta Mesa Services, LP (company) and that I am authorized by said company to make this application, and that this application was prepared under my supervision and direction, and that the facts stated herein are true, correct and complete to the best of my knowledge.

Date: 10/23/2015 Signature: Ronda Louderman

NOTICE: Before submitting this form, be sure that you have given all information requested.

IDL Office Use Only: Approval Stamp

Approval Date: 11/24/15 Approved by: [signature] Signature and Title

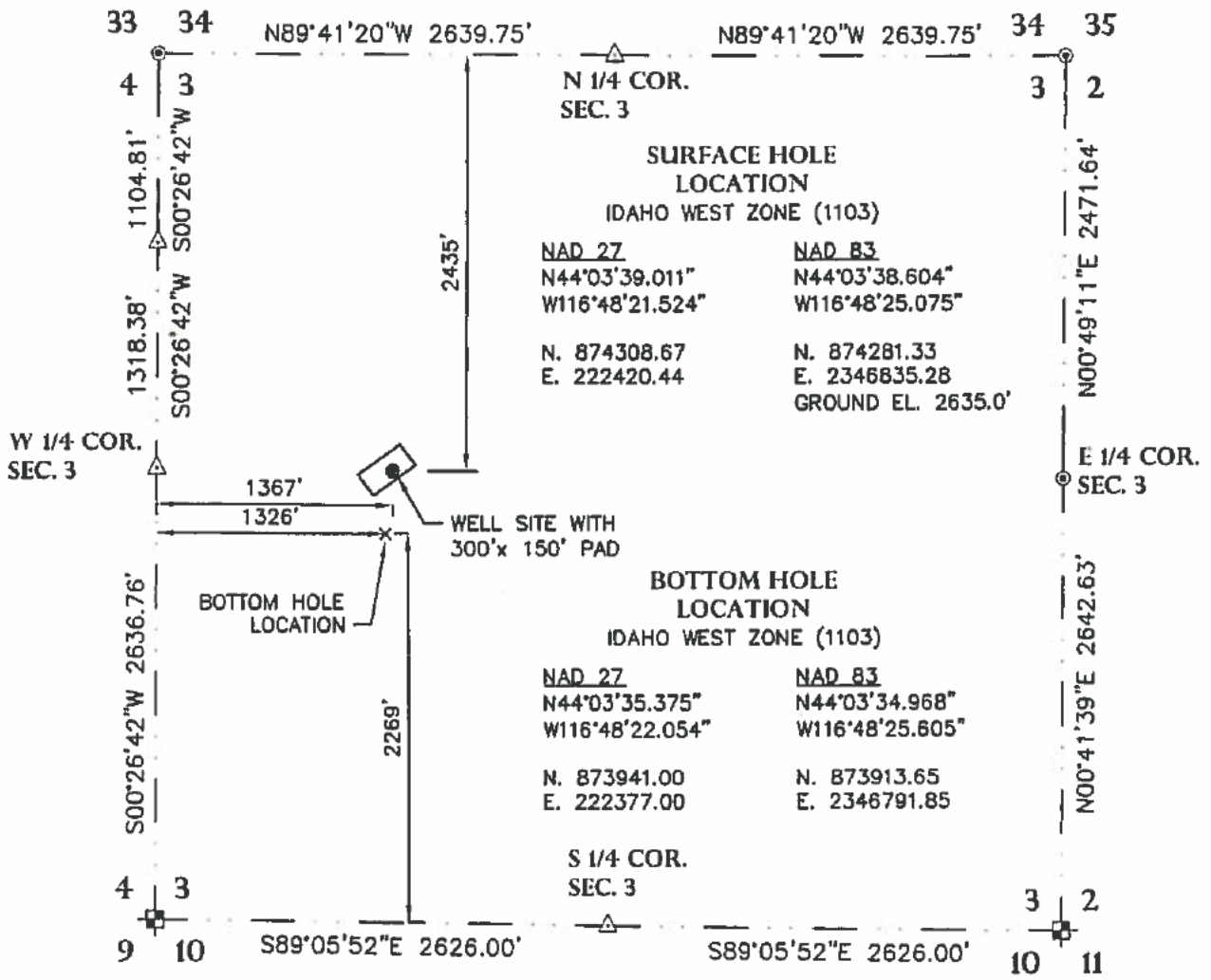
Resource Protection + Assistance Bureau Chief

US Well Number: 11-075-20029 Operator Number (if known): _____

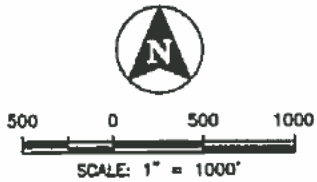
CONFIDENTIAL

LOCATION EXHIBIT MAP OF
ML INVESTMENTS 2-3 WELL SITE

LOCATED IN A PORTION OF SECTION 3
TOWNSHIP 08 NORTH, RANGE 04 WEST, BOISE MERIDIAN
PAYETTE COUNTY, IDAHO
2015



PROFESSIONAL LAND SURVEYOR
LICENSED
11120
10-14-15
STATE OF IDAHO
KEVIN N. SORENSEN



LEGEND

——— · · ———	SECTION LINE
⊕	FOUND ALUMINUM CAP MONUMENT
◉	FOUND 5/8"
△	CALCULATED POINT

T-O ENGINEERS
332 N. BROADMORE WAY
NAMPA, IDAHO 83687-5123
PHONE: (208) 442-6300 FAX: (208) 466-0944

E-FILE: 130216-V-PB-PLSS SEC 3.DWG DATE: OCT. 14, 2015 JOB: 130216

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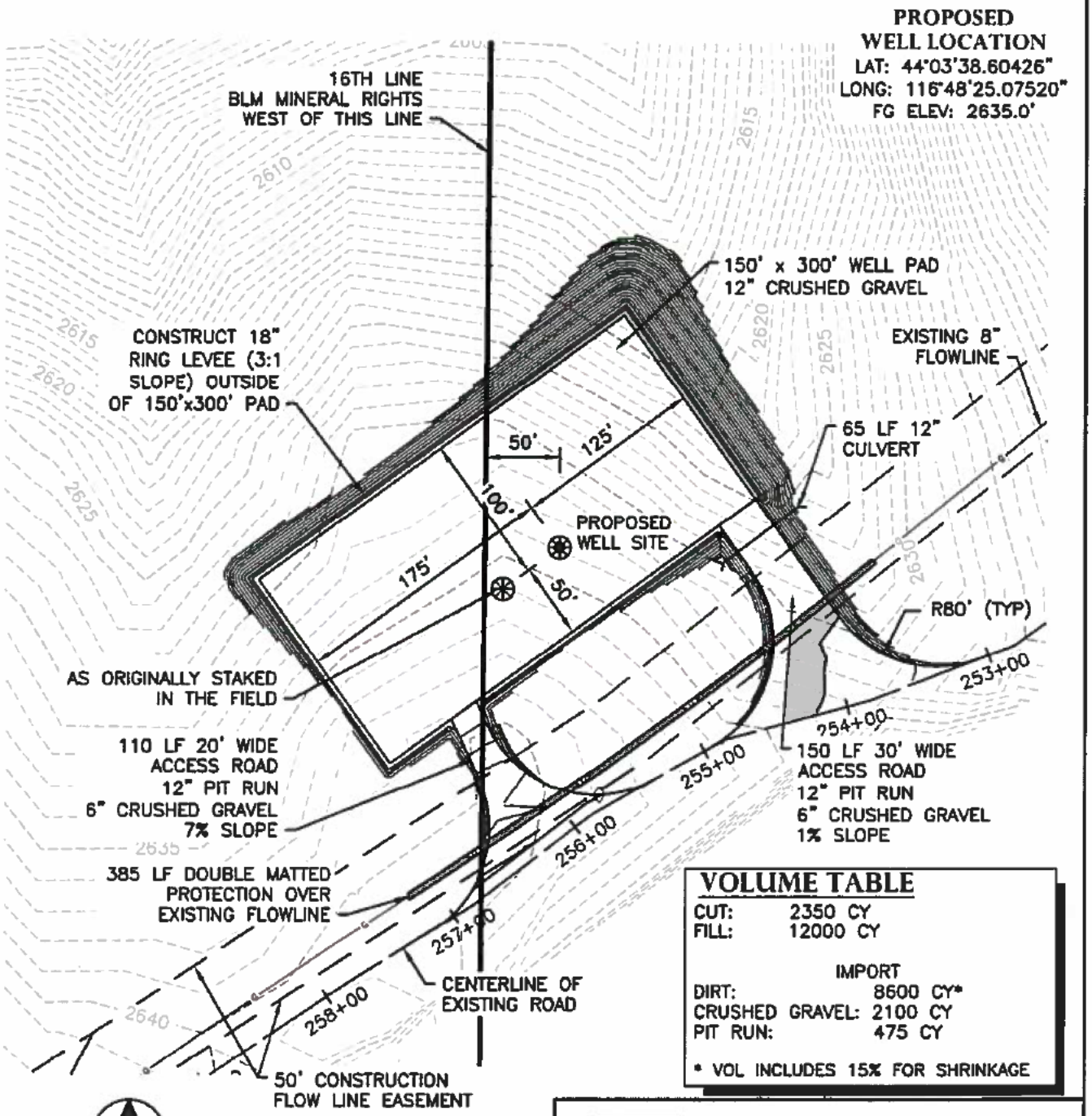
CONFIDENTIAL

CONFIDENTIAL

GRADING EXHIBIT MAP FOR
ML 2-3 WELL SITE

LOCATED IN SECTION 03
TOWNSHIP 08 NORTH, RANGE 04 WEST
PAYETTE COUNTY, IDAHO
2015



VOLUME TABLE

CUT:	2350 CY
FILL:	12000 CY
IMPORT	
DIRT:	8600 CY*
CRUSHED GRAVEL:	2100 CY
PIT RUN:	475 CY

* VOL INCLUDES 15% FOR SHRINKAGE

T-O ENGINEERS
332 N. BROADMORE WAY
NAMPA, IDAHO 83687-5123
PHONE: (208) 442-6300 FAX: (208) 466-0944

E-FILE: 130216-C-2-3_1-16 GRADING.dwg DATE: 10/9/2015 JOB: 130216

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CONFIDENTIAL

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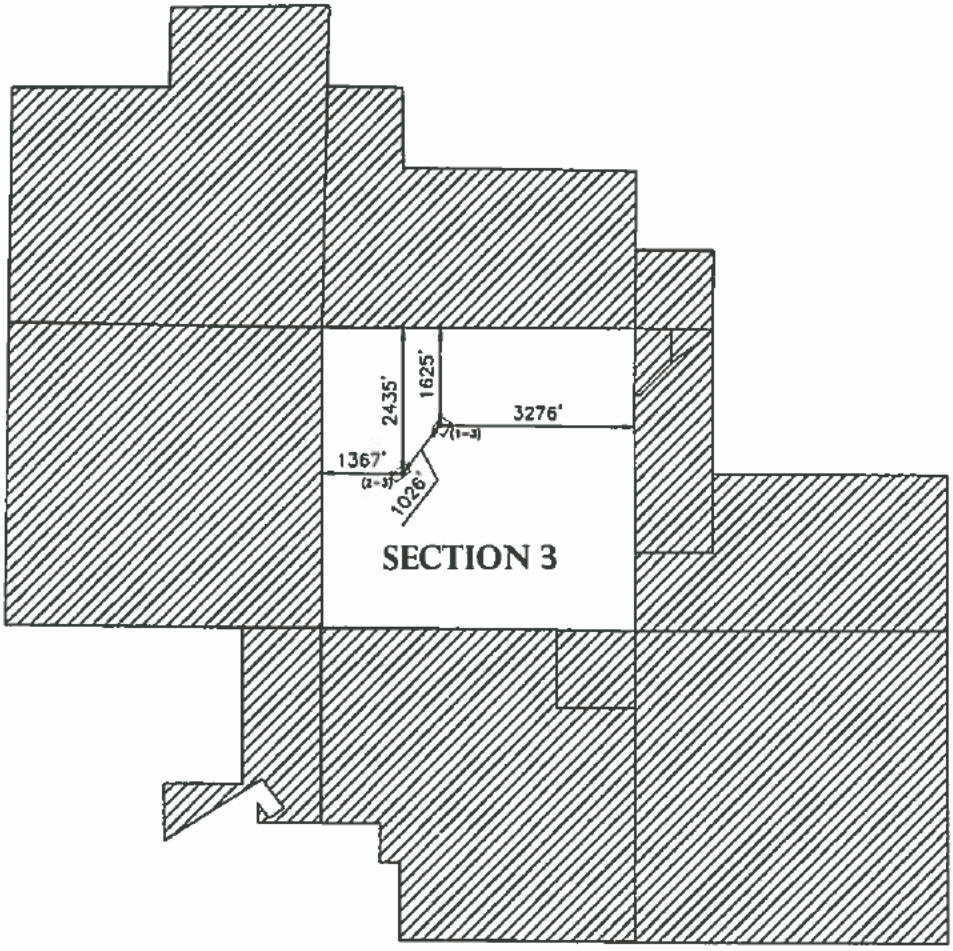
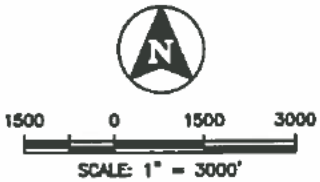
OFFSET OPERATORS EXHIBIT

SECTION 3
TOWNSHIP 08 NORTH, RANGE 04 WEST, BOISE MERIDIAN
PAYETTE COUNTY, IDAHO
2015





LEGEND

OPERATOR: ALTA MESA SERVICES

T-O ENGINEERS
332 N. BROADMORE WAY
NAMPA, IDAHO 83687-5123
PHONE: (208) 442-6300 FAX: (208) 466-0944

E-FILE: 130216-V-PB-OFFSET OPERATOR SEC 3.DWG DATE: OCT. 16, 2015 JOB: 130216

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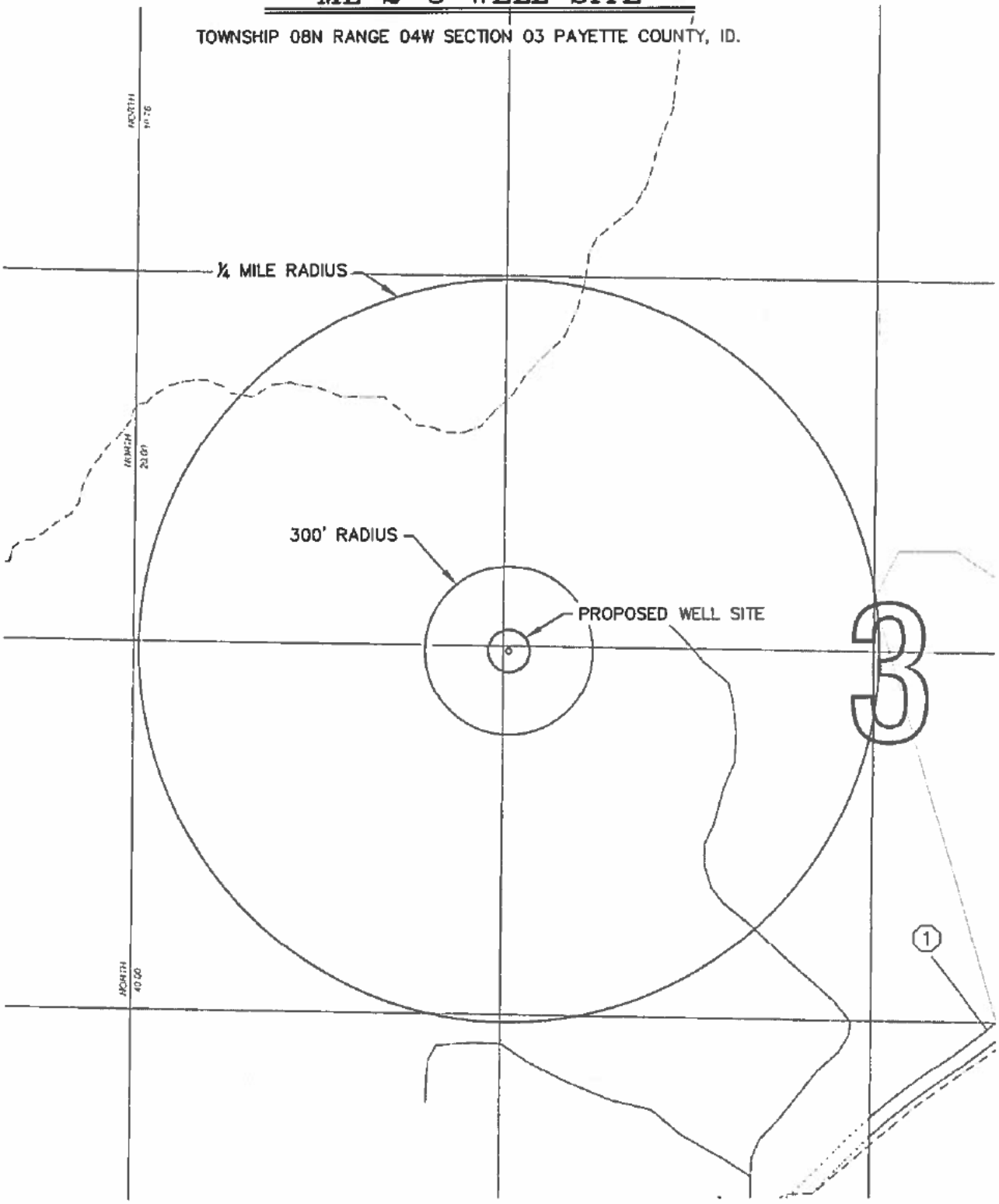
CONFIDENTIAL

CONFIDENTIAL

ML 2-3 WELL SITE

TOWNSHIP 08N RANGE 04W SECTION 03 PAYETTE COUNTY, ID.



250 0 250 500

SCALE: 1" = 500'

T-O ENGINEERS
332 N. BROADMORE WAY
NAMPA, IDAHO 83687-5123
PHONE: (208) 442-6300 FAX: (208) 466-0944

E-FILE: 13C216-C-WATER WELL PLATS Well Location.dwg DATE: 9/21/2015 JOB: 13C216

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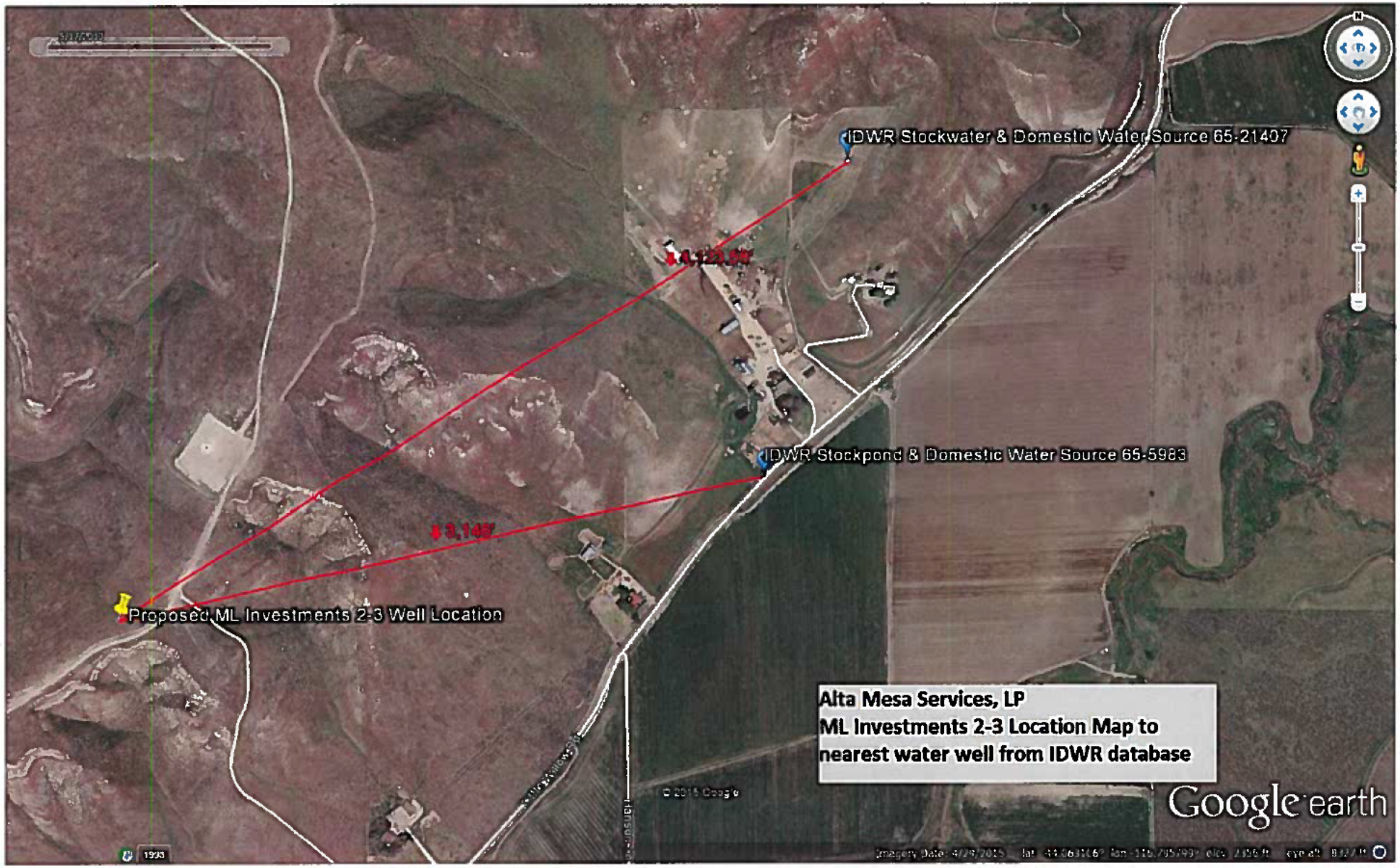
CONFIDENTIAL



CONFIDENTIAL

CONFIDENTIAL

CONFIDENTIAL

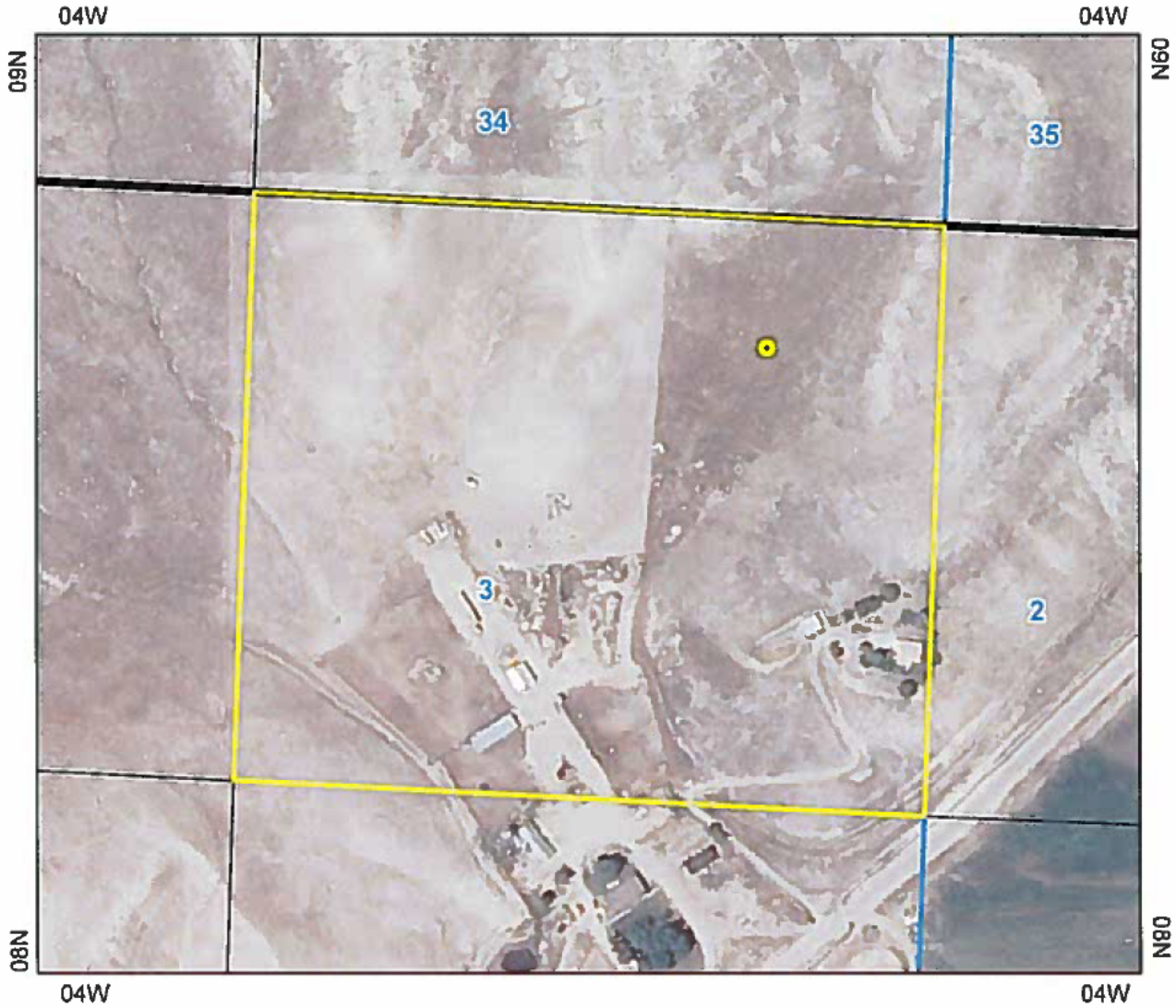
State of Idaho
Department of Water Resources

Water Right

65-21407

STOCKWATER

The map depicts the place of use for the water use listed above and point(s) of diversion of this right as currently derived from interpretations of the paper records and is used solely for illustrative purposes. Discrepancies between the computer representation and the permanent document file will be resolved in favor of the actual water right documents in the water right file.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.04 0.08 0.16 Miles

CONFIDENTIAL

N

Map produced on October 21, 2015

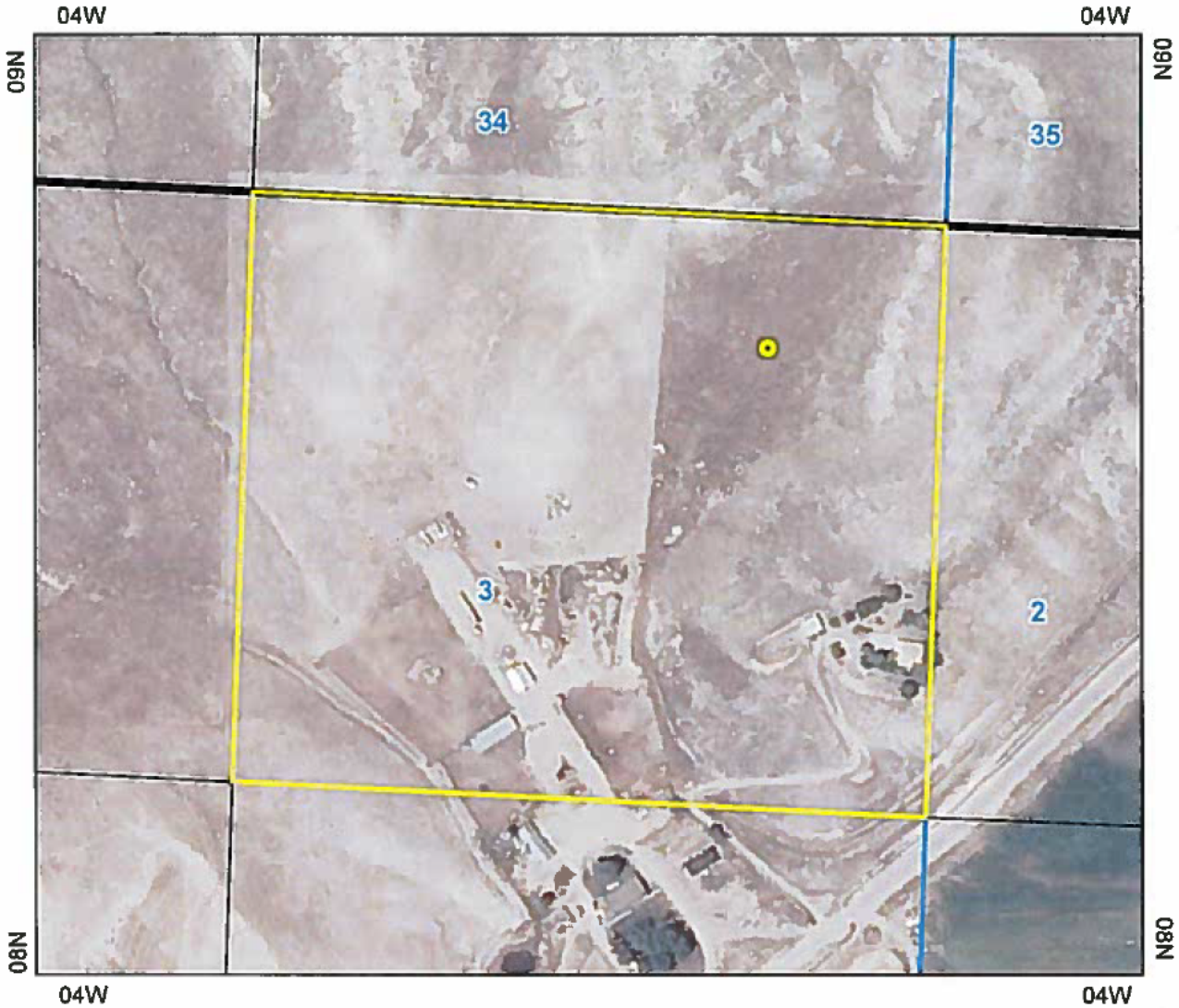
CONFIDENTIAL

State of Idaho
Department of Water Resources

Water Right
65-21407

DOMESTIC

The map depicts the place of use for the water use listed above and point(s) of diversion of this right as currently derived from interpretations of the paper records and is used solely for illustrative purposes. Discrepancies between the computer representation and the permanent document file will be resolved in favor of the actual water right documents in the water right file.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.04 0.08 0.16 Miles

CONFIDENTIAL

N

Map produced on October 21, 2015

CONFIDENTIAL

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

10/21/2015

WATER RIGHT NO. 65-21407

Owner Type	Name and Address
Current Owner	(b) (6) [redacted]
Current Owner	[redacted]
	PAYETTE, ID 83661
	(b) (6) [redacted]

Priority Date: 04/04/1985
Basis: Decreed
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
STOCKWATER	1/01	12/31	0.06 CFS	
DOMESTIC	1/01	12/31	0.04 CFS	
Total Diversion			0.1 CFS	

Location of Point(s) of Diversion:

GROUND WATER | NENENE Lt 1 | Sec. 03 | Township 08N | Range 04W | PAYETTE County

Place(s) of use:

CONFIDENTIAL

Place of Use Legal Description: STOCKWATER PAYETTE County

CONFIDENTIAL

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
08N	04W	3	1	NENE										

Place of Use Legal Description: DOMESTIC PAYETTE County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
08N	04W	3	1	NENE										

Conditions of Approval:

1.	N13	THE QUANTITY OF WATER UNDER THIS RIGHT SHALL NOT EXCEED 13,000 GALLONS PER DAY.
2.	N11	THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.
3.		PARCEL NO. 1316 STOCKWATER, 200 RANGE CATTLE, 4 HORSES

Dates:
Licensed Date:
Decreed Date: 12/24/1998
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date:
Protest Deadline Date:
Number of Protests: 0

Other Information:
State or Federal: S
Owner Name Connector: AND
Water District Number:
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:
Cary Act Number:

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CONFIDENTIAL

Mitigation Plan: False

Close

CONFIDENTIAL

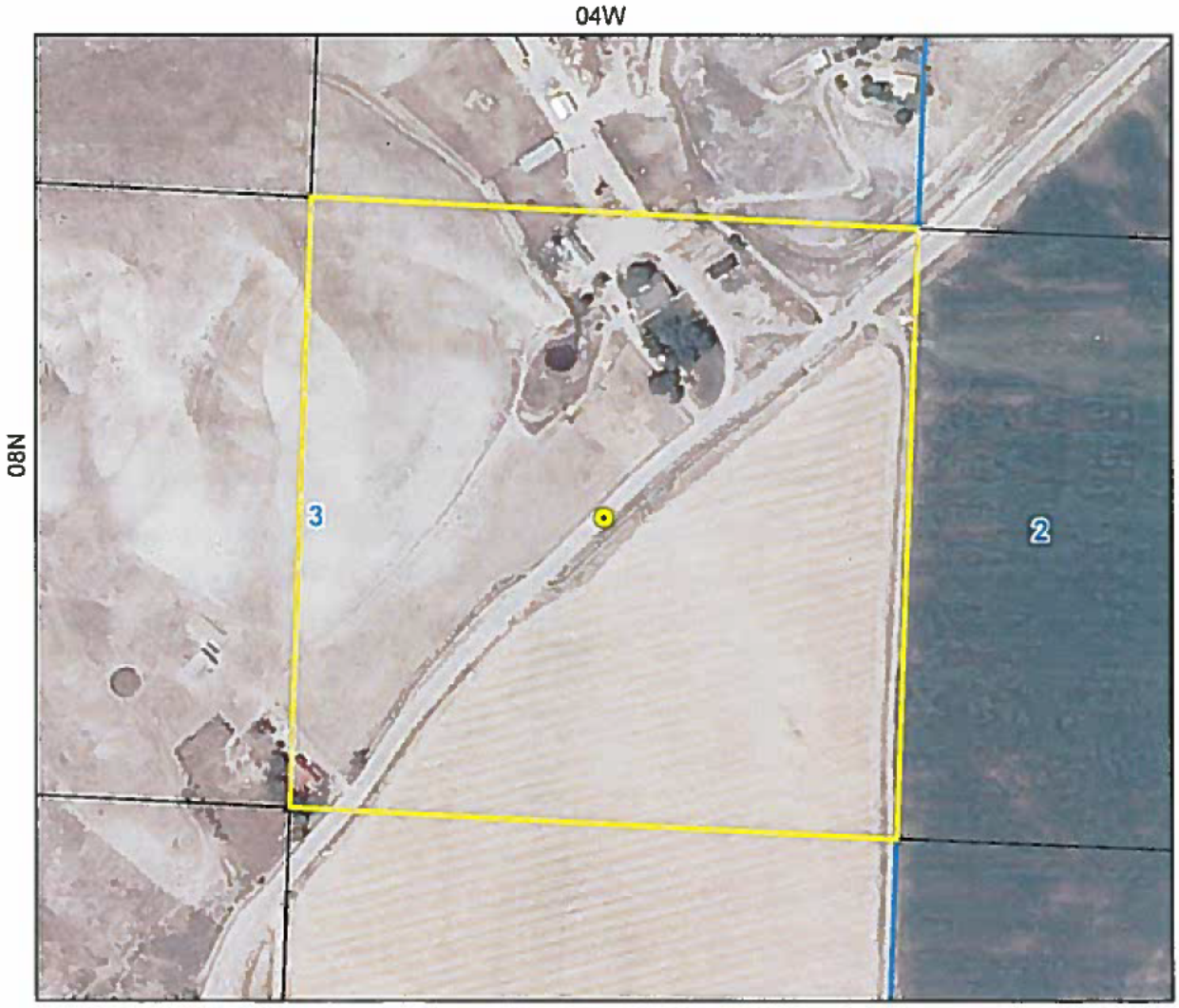
State of Idaho
Department of Water Resources

Water Right

65-5983

DOMESTIC

The map depicts the place of use for the water use listed above and point(s) of diversion of this right as currently derived from interpretations of the paper records and is used solely for illustrative purposes. Discrepancies between the computer representation and the permanent document file will be resolved in favor of the actual water right documents in the water right file.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.0475 0.095 0.19 Miles

CONFIDENTIAL

N

Map produced on October 21, 2015

CONFIDENTIAL

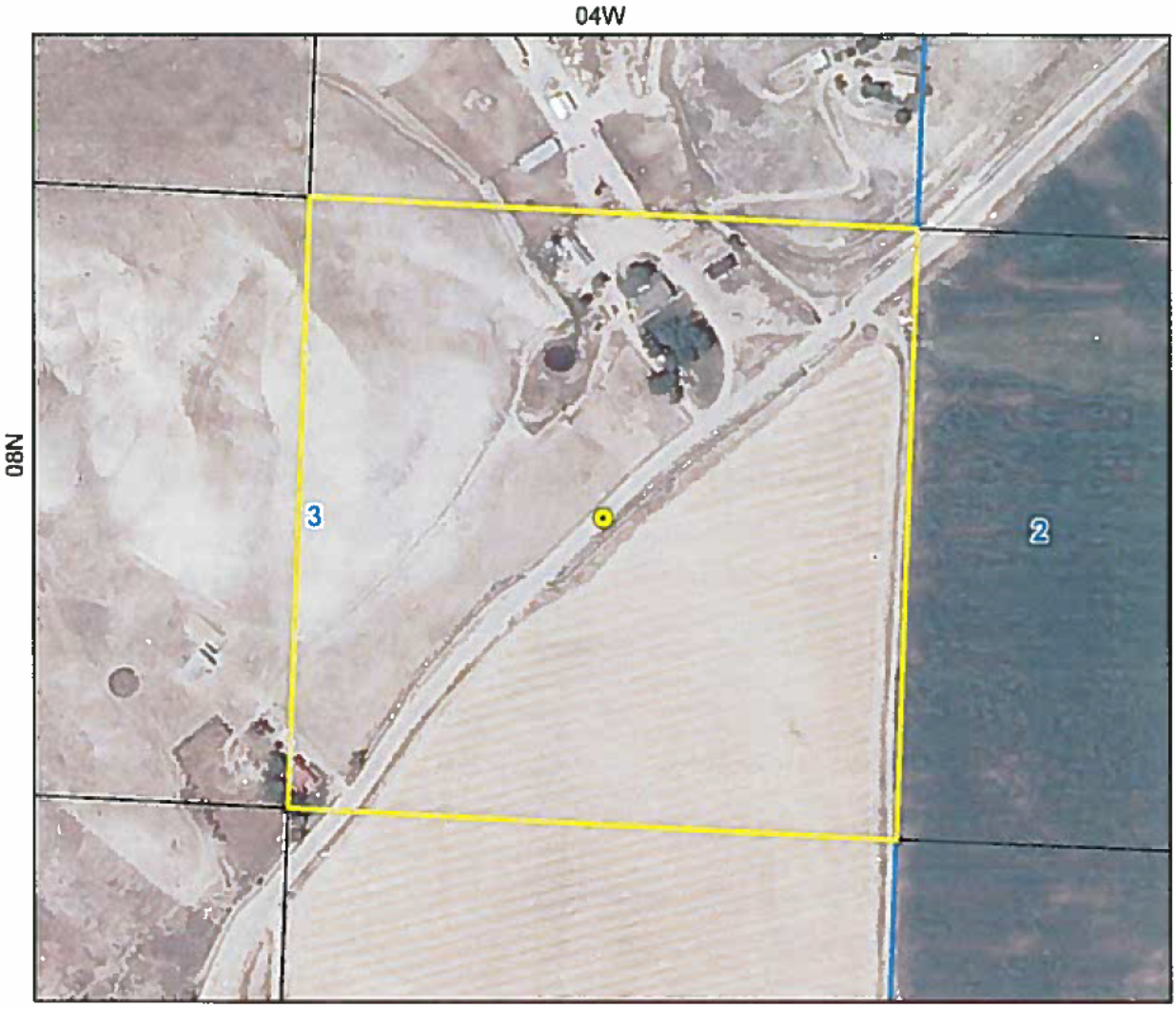
State of Idaho
Department of Water Resources

Water Right

65-5983

STOCKWATER

The map depicts the place of use for the water use listed above and point(s) of diversion of this right as currently derived from interpretations of the paper records and is used solely for illustrative purposes. Discrepancies between the computer representation and the permanent document file will be resolved in favor of the actual water right documents in the water right file.



Point of Diversion
Place Of Use Boundary
Townships
PLS Sections
Quarter Quarters

0 0.0475 0.095 0.19 Miles

CONFIDENTIAL

N

Map produced on October 21, 2015

CONFIDENTIAL

Close

IDAHO DEPARTMENT OF WATER RESOURCES
Water Right Report

10/21/2015

WATER RIGHT NO. 65-5983

Owner Type	Name and Address
Current Owner	(b) (6) [redacted]
Current Owner	[redacted]
	PAYETTE, ID 83661
	(b) (6) [redacted]

Priority Date: 01/01/1925
Basis: Decreed
Status: Active

Source	Tributary
GROUND WATER	

Beneficial Use	From	To	Diversion Rate	Volume
STOCKWATER	1/01	12/31	0.05 CFS	2.7 AFA
DOMESTIC	1/01	12/31	0.04 CFS	1.2 AFA
Total Diversion			0.09 CFS	

Location of Point(s) of Diversion:

GROUND WATER | SENE | Sec. 03 | Township 08N | Range 04W | PAYETTE County

CONFIDENTIAL

Place(s) of use:

Place of Use Legal Description: STOCKWATER PAYETTE County

CONFIDENTIAL

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
08N	04W	3		SENE										

Place of Use Legal Description: DOMESTIC PAYETTE County

Township	Range	Section	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres	Lot	Tract	Acres
08N	04W	3		SENE										

Conditions of Approval:

1.	N13	THE QUANTITY OF WATER UNDER THIS RIGHT SHALL NOT EXCEED 13,000 GALLONS PER DAY.
2.	N11	THE QUANTITY OF WATER DECREED FOR THIS WATER RIGHT IS NOT A DETERMINATION OF HISTORICAL BENEFICIAL USE.
3.		STOCKWATER, 130 RANGE CATTLE, 3 HORSES, 100 CHICKENS PARCEL NO. 1316 11

Dates:
Licensed Date:
Decreed Date: 09/15/1998
Enlargement Use Priority Date:
Enlargement Statute Priority Date:
Water Supply Bank Enrollment Date Accepted:
Water Supply Bank Enrollment Date Removed:
Application Received Date:
Protest Deadline Date:
Number of Protests: 0

Other Information:
State or Federal: S
Owner Name Connector: OR
Water District Number: 65
Generic Max Rate per Acre:
Generic Max Volume per Acre:
Civil Case Number:
Old Case Number:
Decree Plantiff:
Decree Defendant:
Swan Falls Trust or Nontrust:
Swan Falls Dismissed:
DLE Act Number:

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Cary Act Number:
Mitigation Plan: False
Close

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ALTA MESA

ALTA MESA SERVICES, LP

IDL Permit Supplement

ML Investments 2-3

Payette County, ID

October 13, 2015

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1 Background Information

Objective: The objective of this operation is to drill a directional well to 5,000'TVD/5,034'MD.

AFE #:	TBD	**County:**	Payette
Well Type:	Directional	**State:**	Idaho
Well Name:	ML Investments 2-3	**Section:**	3
Field:	Willow	**Township:**	8N
		Range:	4W

Mapping Reference:

System:	NAD27	**Mag Dec:**	14.15° (01-Jul-2013)
Zone:	UTM11	**Grid Conv.:**	-0.75113 °
SPCS:	Idaho West Zone 1103	**Total Corr.:**	14.90113°

Coordinates:

Surface Location:

NAD27

Lat.:	N 44° 03' 39.012"
Long.:	W 116° 48' 21.524"
SPCS:	222420.44 ft. E
	874308.67 ft. N

Bottom Hole Location:

NAD27

Lat.:	44° 03' 35.376"
Long.:	116° 48' 22.054"
SPCS:	222377 ft. E
	873941 ft. N

Elevation:

GL:	2,635 ft.
RKB:	2,647 ft.

Planned TD:

MD:	5,034.0 ft.
TVD:	5,000.0 ft.

Contractor: Paul Graham Drilling **Rig:** #7

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2 Geologic Prognosis

2.1 Prospect

The Ml Investments 2-3 Prospect is designed to test the Willow sand, which is found in the Alta Mesa ML Investments 2-10 well at 3,998' TVD. It is estimated that the target sand will be encountered at +/- 4,468' MD in the Prospect Well.

2.2 PROPOSED WELL:

The well is to be directionally drilled to a measured depth of 5,000' TVD/ 5,034'MD. The surface location is in Section 3-8N-4W (Payette County, Idaho).

2.3 Estimated Geological Formation Tops

		Est. Tops are +/-10'				Correlation Wells		
		Alta Mesa	Alta Mesa	Alta Mesa	Alta Mesa	Alta Mesa	Bridge	
		ML INV. 2-3	ML INV. 2-3	ML INV. 2-3	ML 2-10	Kauffman 1-9	ML- 1-10	
Formation Tops	Comments	Est. MD'	Est. TVD'	Est. SS'	MD '	MD'	MD'	
CS Marker 1		1704'	1704'	943'	1456'	1884'	1381'	
CS Marker 2 (LS Top)		2424'	2423'	224'	2228'	2638'	2150'	
CS Marker 3		3256'	3236'	-589	3067'	3259'	2809'	
Willow Sand		4468'	4433'	-1,786	3998'	4435'	4086'	
Top Basalt		/	/	/	/	/	6028'	

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3 Site Preparation

3.1 Access Roads

The proposed surface location is to be accessed by an existing farm road that supports heavy truck traffic, approximately 1.4 miles of improved road over an existing farm path, and 120' of new roadway.

3.2 Erosion Control

Appropriate grading, mechanical stabilization (rip-rap or hay bales), chemical stabilization (soil cement), and silt fencing will be used to prevent soil erosion. All cut and fill slopes are designed with a minimum 2:1 grade to minimize runoff erosion and ensure mechanical stability. See attached engineering drawings.

3.3 Cellars

An 8' deep round cellar box will be installed after the conductor is installed per the relevant section below.

3.4 Pit System

A closed-loop circulating system will be used for this well from spud. Zero discharge practices will be implemented, and all cuttings and waste fluid will be solidified and disposed of at an approved facility. A third party oilfield waste management contractor will provide waste management and tracking services.

3.5 Sump

The location will have a 2' deep trench on downhill sides where the spoil from that trench will be used to construct an earthen berm around the location. The trench will act as a sump to collect rain and wash water for controlled release or appropriate disposal as required.

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4 Well Construction

4.1 Casing and Cementing Program

Well Interval	Bit Size	Casing Size, Grade and Weight	Casing Setting Depth	Top of Cement	Cement Type and Volume
Conductor	17-1/2"	13-3/8" 54 ppf K-55 LTC	120'	Surface	Class "A" ~140 sxs 100% excess
Surface	12-1/4"	9-5/8" 40 ppf K-55 LTC	1,000'	Surface	Lead: 200 sxs EconoLite @ 11.0 ppg, 100% excess Tail: 70 sxs Class "H" @ 14.8 ppg
Production	8-3/4"	5-1/2" 17 ppf K-55 LTC	5,034'	Surface	Lead: 385 sxs Gasbond @ 13.0 ppg Tail: 390 sxs Gasbond 14.2 ppg

EconoLite: A light density slurry with excellent compressive strength development the slurry exhibits low fluid loss and has low free water (<2%).

GasBond: A premium production casing slurry that has a gas migration control additive for providing an exceptional cement bond to formation and casing. The slurry also contains clay control with low fluid loss for added gas migration inhibition and slurry stability.

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4.2 Proposed Wellbore Schematic

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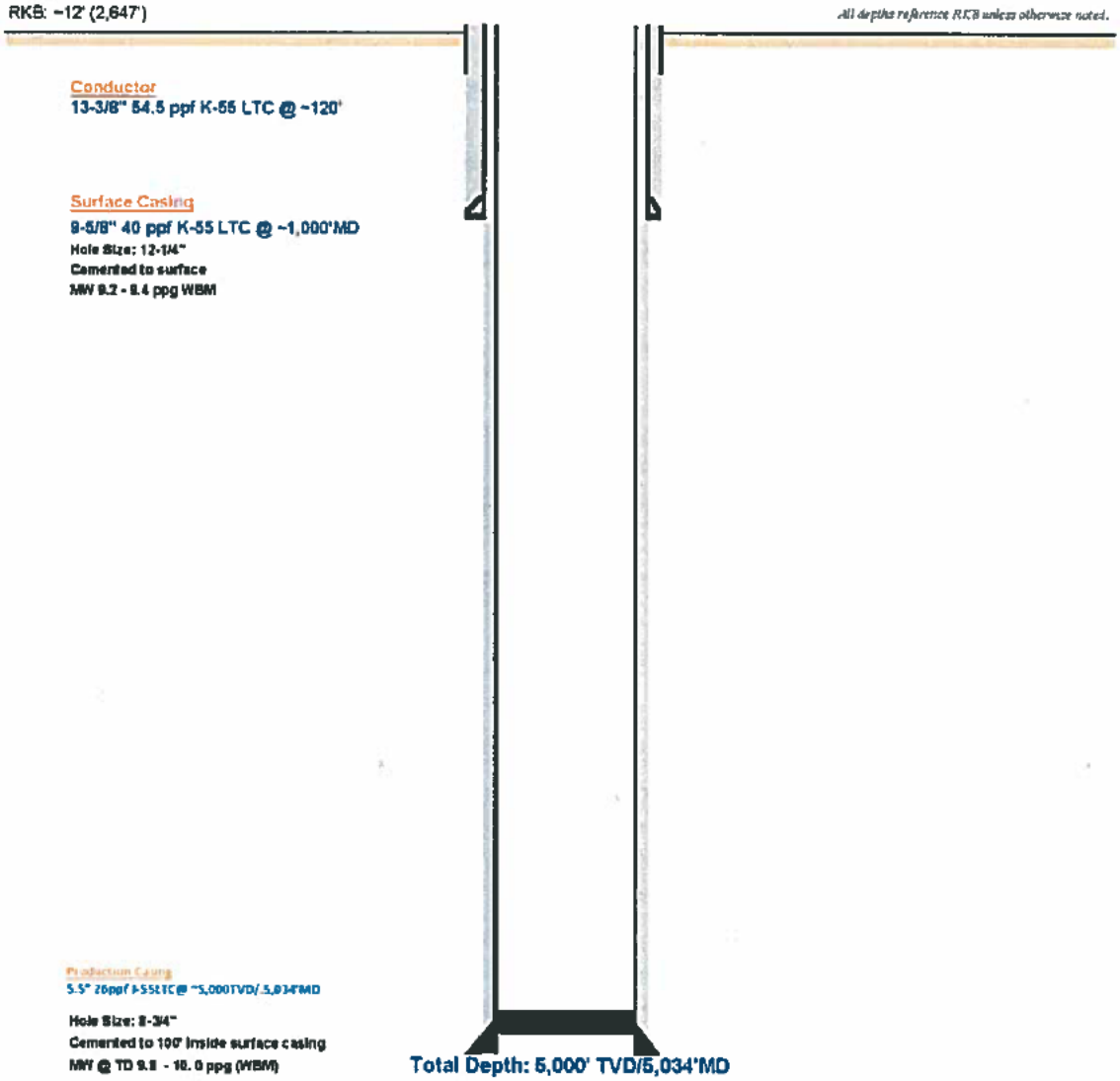
Alta Mesa
ML Investments 2-3
Payette Co., Idaho
Proposed Wellbore Schematic

GL: 2,635'
RKB: ~12' (2,647')

All depths reference RKB unless otherwise noted.



Well Name & No.: ML Investments 2-3	Field: Wildcat
County or Parish: Payette	State: Idaho
Total Depth (MD): 5,034'	(TVD): 5,000'

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4.3 Blow-Out Preventers

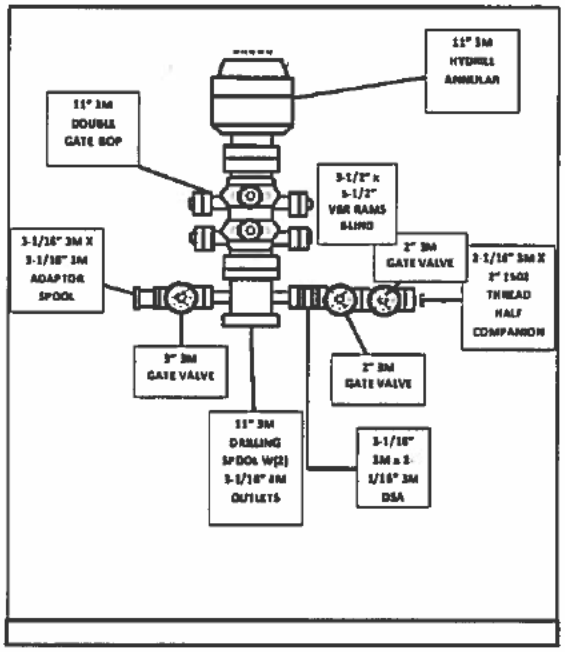
4.3.1 BOP Hardware Configuration

BOP Stack configuration includes an annular preventer and double ram preventers. The top most ram preventer will be fitted with variable ram blocks, the lower ram preventer will be fitted with blind ram blocks. A full-opening safety valve, inside BOP, and functioning wrench – *specific to the pipe in use and only those specific to the pipe in use* – are to be kept on the rig floor with easy access at all times.

4.3.2 BOP Testing

Test annular, rams, choke manifold, FOSV, and IBOP when BOP is first nippled up on casing head. Low-pressure test to 250psi and high-pressure test to 3,000psi (100% of 3M wellhead), except for annular. Test annular preventer to 2,100psi (70% of 3,000psi rating). Test the kelly hose and standpipe back to pump isolation valves to 200 psi above pop off setting or minimum of 3,000 psi. All tests must hold for five minutes. Retest specific component each time a seal is broken. Work BOP's and flush choke lines each trip. Tighten BOP and wellhead bolts every 3 days. Non-ported float valves to be used in BHA after surface casing set.

During drilling and completion operations, the ram-type blow-out preventer shall be function tested by closing on the drill pipe once every seven (7) days. Independently powered accumulators or accumulators and pumps shall maintain a pressure capacity reserve at all times to provide for repeated operation of hydraulic preventers. All tests may be conducted using a test plug. Tests shall be recorded by charts, if required by the Supervisor.



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4.4 13-3/8" Conductor

4.4.1 Drilling

The conductor will be installed via auger and grout unless surface conditions dictate driving.

4.4.2 Casing

Set Depth (ft.)	Top (RTE)	Size	Weight (#/ft)	Grade	Burst	Collapse	Centralizers
120'	GL	13-3/8"	54.5	K-55	2,730 psi	1,130 psi	None

4.5 12-1/4" Surface Hole

4.5.1 Drilling

4.5.1.1 Directional Objective

The surface hole will be drilled vertically to 1,000' MD/TVD.

4.5.1.2 Mud System

The surface hole will be drilled using fresh water based mud. Additives will be included for inhibition and also to build high-viscosity sweeps as necessary.

Measured Depth, ft.	Mud Density, ppg	Funnel Viscosity, cP	Yield Point, lb/100ft^2	API Fluid Loss, ml	pH	LGS %
120 – 1,000'	8.6	25-36	8-12	N/C	7.0-8.0	4 - 7

4.5.2 Open Hole Evaluation

No open-hole evaluation will be conducted in this interval

4.5.3 Casing

The surface casing is to be set at a depth that isolates problematic formations and usable water strata.

Set Depth	Top (RTE)	Size	Weight (#/ft)	Grade	Conn	Internal Diameter	Burst	Collapse	Tension
1,000'	GL	9-5/8"	40.0	K-55	LTC	8.835"	3,950 psi	2,570 psi	561 kips

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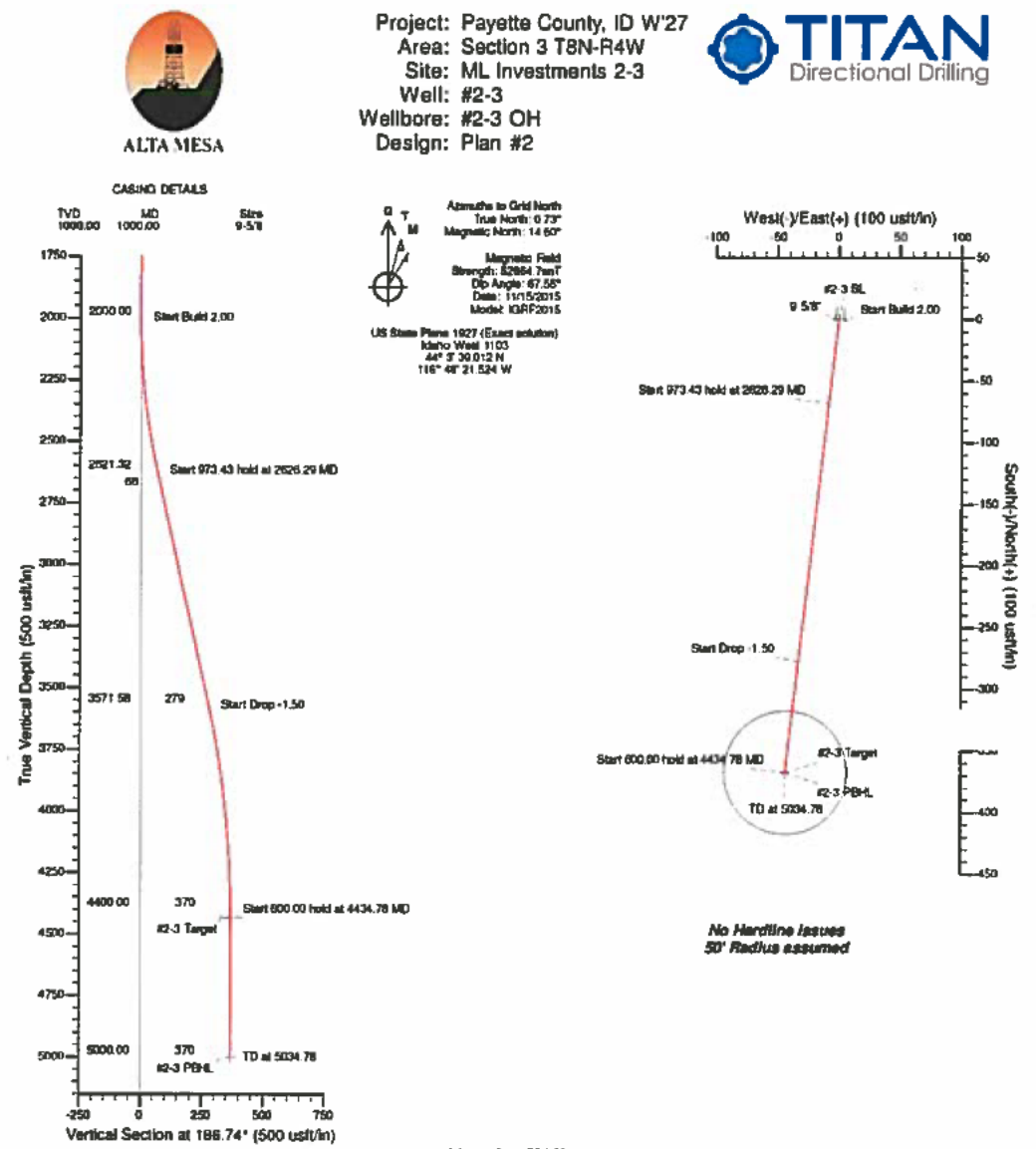
4.6 8-3/4" Production Hole

The 8-3/4" hole will be drilled directionally to ~5,000'TVD/5,034'MD. Kickoff point will be ~2,000' TVD/MD with a build rate of 2°/100 feet to an angle of 12.5°. At ~3,571'MD the well will be gradually dropped at 1.5°/100 feet back to vertical at 4,434'MD. Angle at total depth will be ~0°.

4.6.1 Drilling

4.6.1.1 Directional Objective

The 8-3/4" production hole will be drilled directionally to 5,000' TVD/ 5,034'MD. Surveys will be obtained using a measurement while drilling (MWD) tool.



DESIGN TARGET DETAILS

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
#2-3 BL	0.00	0.00	0.00	674306.67	222420.44	44° 3' 39.612 N	116° 46' 21.524 W	Point
#2-3 Target	4433.00	-367.66	-43.44	673941.00	222377.00	44° 3' 35.376 N	116° 46' 22.054 W	Circle (Radius: 50.00)
#2-3 PBHL	5000.00	-367.66	-43.44	673941.00	222377.00	44° 3' 35.376 N	116° 46' 22.054 W	Point

SECTION DETAILS

Sec	MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Target
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
2	2000.00	0.00	0.00	2000.00	0.00	0.00	0.00	0.00	0.00	
3	2626.29	12.53	186.74	2621.32	-67.72	-8.00	2.00	186.74	68.19	
4	3599.73	12.53	180.74	3571.58	-277.38	-32.77	0.00	0.00	278.31	
5	4434.78	0.00	0.00	4400.00	-367.66	-43.44	1.50	180.00	370.22	
6	5034.78	0.00	0.00	5000.00	-367.66	-43.44	0.00	0.00	370.22	#2-3 PBHL

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4.6.1.2 Mud System

The production hole interval will be drilled with a fresh water based mud system.

Measured Depth, ft.	Mud Density, ppg	Funnel Viscosity, cP	Yield Point, lb/100ft²	HTHP Fluid Loss, ml	ES	LGS %
1,000 – 5,034'	9.2 -9.8	36 - 45	6 - 10	<10.0	>600	< 5%

A fresh water based drilling fluid will be used from below surface casing to total depth. The production casing will be cemented to surface thus, no drilling fluid will be left in the hole. Drill cuttings waste generated will be managed on location by a third party oilfield waste management company who will supervise the solidification, tracking and transportation to an approved waste disposal site of all oilfield waste generated while drilling. A zero-discharge closed loop sysem will be employed.

4.6.2 Logging Program

While Drilling: Mud logging only

Coring: None

Wireline: After reaching TD, and conditioning the hole, wireline evaluation will be conducted as follows:

- Gamma Ray
- Propagation Resistivity
- Density
- Neutron Porosity
- Electron Capture Spectroscopy
- Sonic
- Percussion sidewall cores

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4.6.3 Production Casing

The production casing string is designed to be run to total depth and withstand the expected wellbore pressures.

Set Depth ft.	Top (RTE)	Size	Weight (#/ft)	Grade	Conn.	Drift	Burst	Collapse	Tension
5,034'	GL	5-½"	17.0	K-55	LTC	4.892"	5,320 psi	4,910 psi	272 kips

5 Completion

Method of completion will be determined subsequent to review of open-hole log data and cased hole cement bond logs (CBL).

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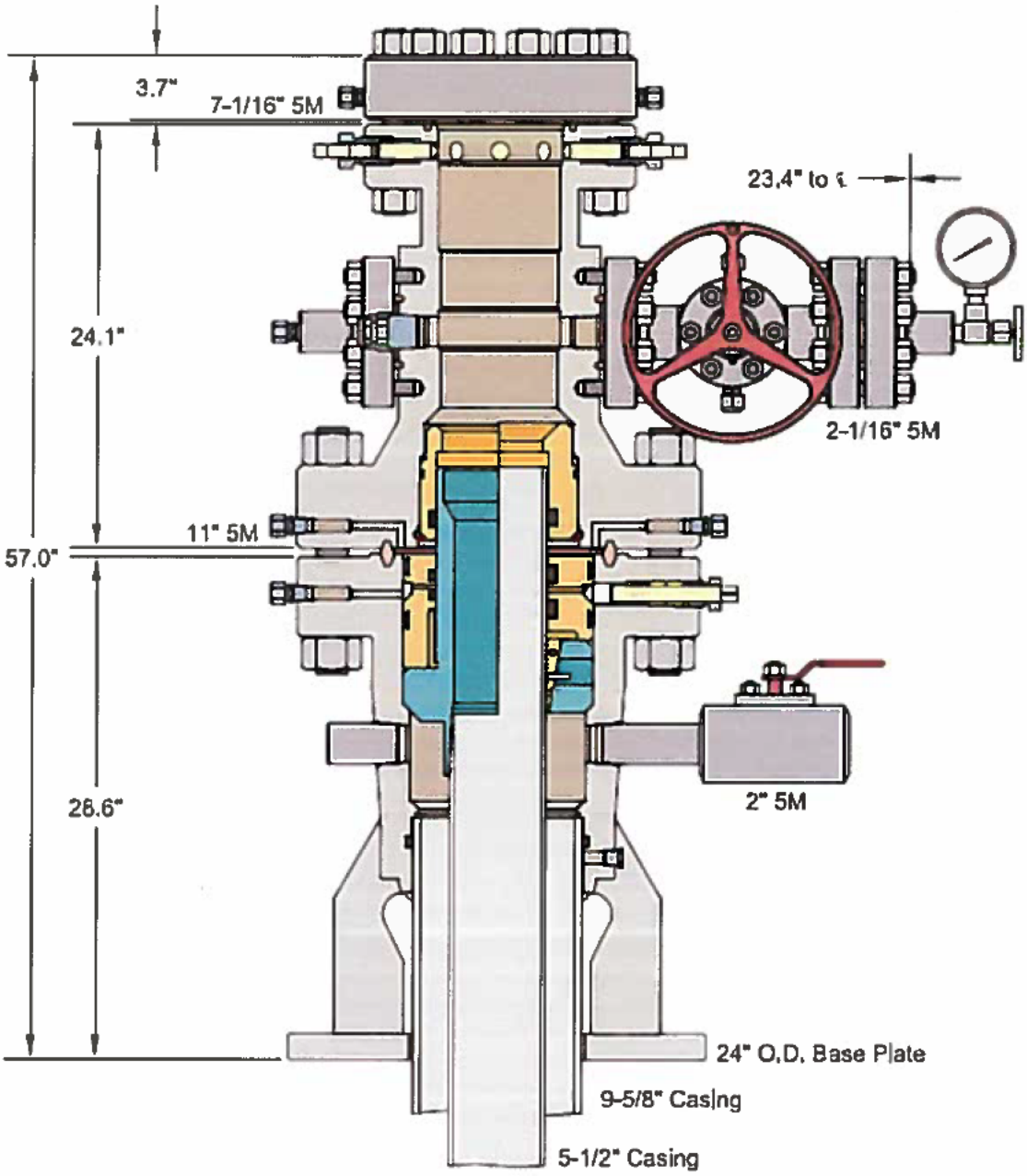
6 Wellhead

6.1 Surface Wellhead System



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6.2 Complete Wellhead System with Tree

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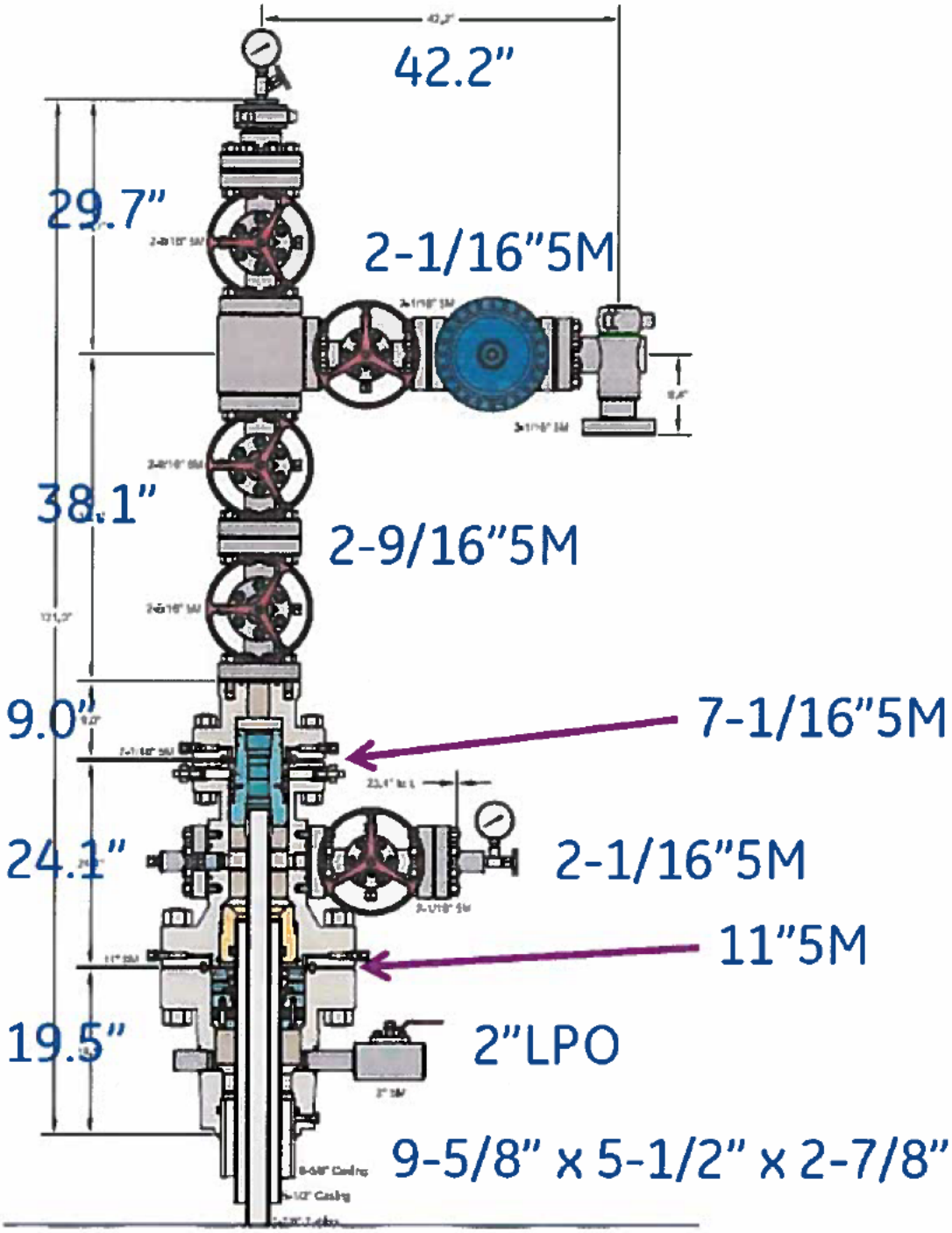

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7 Reclamation

Reclamation will be conducted in accordance with IDAPA 20.07.02.325. To achieve those requirements, Alta Mesa Services, L.P. proposes to address reclamation through a multistep process which is outlined below. As provided for in IDAPA 20.07.02.325.08, Alta Mesa Services, L.P. may enter into a Surface Use Agreement with the landowner the terms of which will ensure that the site is left in a stable, non-eroding condition as required.

1. Re-establish slope stability, surface stability, and desired topographic diversity.
    a. Reconstruct the landscape to the approximate original contour unless otherwise provided for in the Surface Use Agreement
    b. Maximize geomorphic stability and topographic diversity of the reclaimed topography.
    c. Eliminate high walls, cut slopes, and/or topographic depressions on site, unless otherwise approved.
    d. Minimize sheet and rill erosion on the reclaimed area. Eliminate mass wasting, head cutting, large rills or gullies, down cutting in drainages, or overall slope instability on the reclaimed area.
2. Maintain the integrity of the topsoil and subsoil (where appropriate and not otherwise dictated by the Surface Use Agreement)
    a. Identify salvaged topsoil and subsoil.
    b. Segregation of salvaged soils to protect those materials from erosion, degradation, and contamination.
    c. Incorporate stored soil material into the disturbed landscape to the extent practicable.
    d. Stockpiled soils to be stored beyond one growing season shall be stabilized with appropriate vegetation
    e. Record location and approximate volumes of stockpiles.
3. Prepare site for revegetation upon completion of well activities – plugging/abandonment.
    a. Redistribute soil materials in a manner similar to the original vertical profile.
    b. Reduce compaction to an appropriate depth (generally below the root zone) prior to redistribution of topsoil, to accommodate appropriate site-specific plant species.
    c. Provide suitable conditions to support the long term establishment and viability of the desired plant community.
    d. Protect seed and seedling establishment (e.g. erosion control matting, mulching, hydro-seeding, surface roughening, fencing, etc. to be determined based upon site specific conditions
4. Establish a desired self-perpetuating native plant community based upon region specific guidance available from NRCS
    a. Establish species composition, diversity, structure, and total ground cover appropriate for the desired plant community
    b. Select genetically appropriate and locally adapted native plant materials based on the site characteristics and setting.
        i. Seed mixtures shall be selected based on soil type, site conditions and intended final use
        ii. Seed shall not be used later than one year after the test date that appears on the label.
        iii. The bags of seed shall be clearly labeled indicating test date, weed percentage or % Pure Live Seed (PLS), viability or germination percentage, and inert material

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c. Select non-native plants only as a short term and non-persistent alternative to native plant materials. Ensure the non-natives are designed to aid in the re-establishment of native plant communities. Revegetate in accordance with best practices described below:
   i. Re-spread topsoil to a minimum depth of 4 inches.
   ii. Prepare a friable but firm and weed free seedbed that is not compacted by prior construction work.
   iii. Appropriate firmness can be estimated when a person leaves about a ¼ inch deep footprint.
   iv. Remove rocks, twigs, concrete, foreign material and clods over 2 inches that can't be broken down.
   v. Soil moisture content shall be at least 30% soil capacity (estimated). Do not seed into undesirable moisture conditions (e.g. "dust" or "mud").

d. Plant communities shall be evaluated annually for two years to ensure revegetation success as determined by IDAPA 20.07.02.325
   i. Repair and reseed areas that have erosion damage as necessary.
   ii. If a stand has less than 70% ground cover after two years, re-evaluate the choice of plant materials, methods and available light and moisture. Re-establish the stand with modifications based on the evaluation

5. Reestablish initial visual composition
   a. Ensure the reclaimed landscape features conform to the prior conditions of the site.

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ALTA MESA SERVICES, LP
15021 Katy Freeway, Suite 400
Houston, Texas 77094
(281) 530-0991
(281) 530-5278 FAX

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October 16, 2015

Mr. Paul Lowery
Idaho Department of Lands
Idaho Oil and Gas Conservation Commission
300 N. 6th Street
Suite 103
Boise, ID 83702

RE: Exceptional Location Letter Application
Section 3, Township 8 North, Range 4 West
Willow Field, Payette County, Idaho

Mr. Lowery,

Please allow this letter to serve as Alta Mesa Services, LP's application for an exceptional location for its well proposed in Section 3, Township 8 North, Range 4 West in the Willow Field located in Payette County, Idaho. The well permit application is being transmitted concurrently for your consideration and Alta Mesa Services, LP ("Applicant") requests that this letter application be attached to the well permit as an additional submittal.

In accordance with IDAPA 20.07.02.330.04, the Applicant submits with this application a plat which provides the following information:

a. The location at which an oil or gas well could be drilled in compliance with Subsections 330.01 or 330.02 or the applicable order; (*this application request approval of a second well in the section due to faulting and is shown to be more than 330* feet from the section boundary)
b. The location at which the applicant requests permission to drill; and (*demonstrated by the Proposed Well Location*)
c. The location at which oil or gas wells have been drilled or could be drilled, in agreement with Subsection 330.01 or 330.02 or the applicable order, directly or diagonally offsetting the proposed exception. (*In Section 3, the ML Investments No.1-3 is indicated in the north-central portion of the section. The Applicant has drilled additional wells in several of the offset sections at legal locations within those sections. The proposed well is also planned at a legal location. Each existing well is well beyond the expected potential drainage zone of the proposed wells.*)

It should be noted that AM Idaho, LLC is the only working interest owner in the offset sections and thus would be operator in each of those sections. AM Idaho, LLC waves any objection to this application and requests that the Department approve the application immediately.

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The Applicant, Alta Mesa Services, LP, requests the approval of an exceptional location due to surface and reservoir characteristics related to the target formation. The proposed surface hole and bottom hole locations are the most protective of the environment; are the most prospective for oil and/or gas; and are necessary to prevent waste and avoid stranding of resources.

The target formation presents the optimal drilling target at the location selected by the Applicant. Specifically, three dimensional seismic survey data identified the target as the top of the correlative sand, identified for discussion purposes as the "Willow Sand", previously found to be productive in the DJS 1-15 well. Seismic data of the target indicates [redacted], i.e. a likely indicator of high-hydrocarbon saturation. The reservoir appears to be fault separated in [redacted] with the ML Investments #1-3 placed on the [redacted] side of the fault and the proposed ML Investments #2-3 placed on the [redacted] side of the fault. Placement of the proposed well will allow the recovery of reserves otherwise stranded within Section 3.

Geologically, the selected target is believed to be the best potential location within the reservoir with the greatest chance that the target will be prospective for oil and/or gas. Selection of this location will reduce the number of wells necessary to fully develop the prospect by selecting the target with the greatest drainage potential which will prevent economic waste; prevent drilling of additional otherwise unnecessary wells which causes additional surface impacts; and avoid creating areas within the reservoir that are incapable of being drained.

For the reasons stated above, Alta Mesa Services, LP respectfully requests the approval of this exceptional location. If you have further questions, please contact me.

Sincerely,

John F. Peiserich

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TIME-STRUCTURE MAP: TOP OF WILLOW SANDS - SECTION 3 AREA (8N-4W)

NOTE: This structure map shows the locations of the proposed ML Investments #1-3 & #2-3 wells. The ML #1-3 targets the [redacted] of the [redacted] in the center of section 3. The ML #2-3 targets a [redacted] in the [redacted] of the section. Both wells are deemed necessary to prevent waste and ensure maximum recovery of any hydrocarbons present in the section.

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ALTA MESA SERVICES, LP
15021 Katy Freeway, Suite 400
Houston, Texas 77094
(281) 530-0991
(281) 530-5278 FAX

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October 16, 2015

Mr. Paul Lowery
Idaho Department of Lands
Idaho Oil and Gas Conservation Commission
300 N. 6th Street
Suite 103
Boise, ID 83702

RE: Directional Deviation Letter Application
Section 3, Township 8 North, Range 4 West
Willow Field, Payette County, Idaho

Mr. Lowery,

Please allow this letter to serve as Alta Mesa Services, LP's application for a directional deviation for its second well proposed in Section 3, Township 8 North, Range 4 West in the Willow Field located in Payette County, Idaho. The well permit application has previously been transmitted for your consideration and Alta Mesa Services, LP ("Applicant") requests that this letter application be attached to the well permit as an additional submittal.

In accordance with IDAPA 20.07.02.330.02, the Applicant submits the following information:

a. Alta Mesa Services, LP
15021 Katy Freeway, Suite 400
Houston, TX 77094

b. ML Investments #2-3
Willow Field, I-15 Sand, Payette County

c. Surface Hole Location

2,435 feet from the North Section Line and 1367 feet from the West Section Line of Section 3, Township 8 North, Range 4 West

NAD27

Lat:	N 44.03'39.012°
Long:	W 116.48'21.524°

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Bottom Hole Location
Approximately 2,750 feet from the North Section Line and 1,300 feet from the West Section Line of Section 3, Township 8 North, Range 4 West

NAD27
Lat: N 44.03'35.376"
Long: W 116.48'22.054"

d. The proposed deviation is request to meet lease obligations to the landowner; avoids unnecessary damages to the surface; and allows for the most effective drainage of the reservoir by placing the bottom hole at a location which is most prospective for oil and/or gas. Accordingly, it prevents waste and avoids stranding of resources. Specifically the surface hole location directly above, i.e. the location that would require no directional deviation, is located along the bluff wall and the resulting well location would be create engineering risk that is unwarranted. The proposed surface hole location is located such that engineering risk posed by the bluff wall is eliminated. The placement of a well pad in the vertical location would present an unacceptable risk of loss of stability in the bluff wall endangering the existing road and require substantial grading which would adversely impact surface water. As a result, the Applicant, in coordination with the landowner, has selected a significantly more appropriate location that can be developed without the same impacts.

e. AM Idaho, LLC holds the all of the leasehold and is the offset operator in each of the offset sections. No other operator exists in any of the offset sections thus no notice is required.

f. Below is the signature of the Applicant and AM Idaho, LLC's authorized representative.

g. As referenced in e. above, no other operators exist.

h. This application is accompanied by a plat that shows the surface hole location. Additionally, the application is accompanied by a plat that indicates AM Idaho, LLC is the offset operator in each of the offset sections.

Pursuant to IDAPA 20.07.02.330.04, AM Idaho, LLC requests that, since no other offset operators exist and it is the only offset operator, the Department treat this application as written consent by the offset operator and thereby waive the fifteen (15) day waiting period otherwise required.

For the reasons stated above, AM Idaho, LLC respectfully requests the approval of this exceptional location. If you have further questions, please contact me.

Sincerely,

CONFIDENTIAL

John F. Peiserich