



PO Box 99 • Eastlake, CO 80614 • (303) 857-9999 • FAX (303) 450-9200 • [www.oilpermits.com](http://www.oilpermits.com)

April 4, 2013

Mr. Timothy J. Kelly  
Colorado State Board of Land Commissioners  
1127 Sherman Street, Suite 300  
Denver, CO 80203

Re: Notice of Intent to Conduct Surface Operations  
Bulldog 5 Well Pad (See Listing Attached)  
Section 15, T8N – R90W  
Moffat County, Colorado

Dear Mr. Kelly:

The Colorado Oil and Gas Conservation Commission (COGCC) has specific guidelines and procedures regarding surface activities. These rules stipulate an operator must give an affected surface owner notice in writing at least thirty (30 days) prior to drilling an oil and gas well.

It is Axia Energy LLC's intention to begin operations to drill a single vertical well (Bulldog 10-24V-890). If the well is successful, 4 additional horizontal wells will be drilled from the same wellpad. Axia Energy LLC may drill the well thirty (30) days from this date or sooner if you approve to waive the thirty day notice requirement given below. It is your responsibility to notify the tenant farmer, if applicable, of this proposed operation.

Enclosed please find the following information:

- \* A brochure describing surface owner rights and responsibility
- \* The policies for a consultation with Axia Energy, LLC (COGCC Rule 306)
- \* A copy of the survey, plats and diagrams for this project

We are currently working with Lane Osborn in your Craig, Colorado field office to schedule an onsite inspection with the surface tenant, Doug Camilletti, to discuss the proposed location of the well site, access roads, production facilities and reclamation.

If you have any questions concerning Axia Energy, LLC's plans, please contact me at 303-857-9999.

Sincerely,

PERMITCO INC.

Lisa Smith  
Agent for Axia Energy, LLC

cc: Lane Osborn, Craig, CO

Page Two  
April 13, 2013

Well Name	Footages	Sec., Twn., Range
Bulldog 10-24V-890	60' FNL and 2058' FWL	Sec. 15, T8N – R90W
Bulldog 10-24H-890	73' FNL and 2015' FWL	Sec. 15, T8N – R90W
Bulldog 10-34H-890	66' FNL and 2038' FWL	Sec. 15, T8N – R90W
Bulldog 15-11H-890	88' FNL and 1967' FWL	Sec. 15, T8N – R90W
Bulldog 15-21H-890	80' FNL and 1991' FWL	Sec. 15, T8N – R90W

I/We hereby waive the notice requirement and hereby authorize Axia Energy, LLC to begin operations upon receipt of the drilling permits from the Colorado Oil and Gas Conservation Commission.

Colorado State Board of Land Commissioners

By: \_\_\_\_\_  
Timothy J. Kelly, Minerals Unit Leasing Manager

Date: \_\_\_\_\_



Colorado Department of Natural Resources

## OIL AND GAS WELL NOTIFICATION, CONSULTATION, AND RECLAMATION RULES

### INFORMATION FOR OIL AND GAS OPERATORS, SURFACE OWNERS AND SURFACE TENANTS

***DISCLAIMER: Surface owners are advised to obtain legal advice as may be appropriate to their particular circumstances. Landowners may or may not own the mineral rights underlying their property. In either case, surface owners and tenants may be faced with oil and gas mineral owners exercising their right to drill and produce wells on the property. This brochure is designed to describe the key points of the regulations for the reclamation of land disturbed by oil and gas activity. These regulations are enforced by the Colorado Oil and Gas Conservation Commission.***

*This brochure is a summary only, and is not to be used as a substitute for the complete rules and regulations.*

revised 08/25/2006

## STATEWIDE OIL AND GAS RECLAMATION RULES

The Colorado Oil and Gas Conservation Commission's (COGCC) statewide reclamation rules are designed to ensure that the surface of the land is restored as closely as possible to its pre-development condition. These rules respect the surface owner's need to request waivers of certain requirements under special circumstances.

The rules were developed with input from the oil and gas industry, the agricultural industry, the environmental community, and local governments. The COGCC also consulted with the Colorado Agricultural Commission as the rules were being written.

### ***CROP LAND OR NON-CROP LAND? (100 Series Rules Definitions)***

The requirements for notification by oil and gas operators to surface owners, as well as site construction and reclamation requirements, depend on whether or not the wellsite and access road are built on ***Crop Land*** or ***Non-Crop Land***.

***Crop Land***--Lands which are cultivated, mechanically or manually harvested, or irrigated for vegetative agricultural production.

***Non-Crop Land***--Lands which are **not** defined as Crop Land, including range land.

### ***SURFACE OWNER NOTIFICATION BY THE OIL AND GAS OPERATOR (Rule 305)***

Before drilling, the oil and gas operator is required to:

- mail or deliver a notice to the **surface owner** and local government (to identify a surface owner for the purpose of giving the Rule 305 notice, the operator may rely on the records at the assessor for the county where the oil and gas operations will occur); and
- post a notice on the drillsite.

Notice is also required:

- if future operations are planned at an existing well site that cause significant surface disturbances, and
- before final reclamation of the wellsite and access roads.

The notice timing requirements depend on the type of oil and gas operations:

<b><u>OPERATION</u></b>	<b><u>CROP LAND</u></b>	<b><u>NON-CROP LAND</u></b>
Drilling	30 Days	30 Days
Additional Notice of Drilling on Irrigated Crop Land	14 Days	Does Not Apply
Future Well Operations	7 Days	7 Days
Final Reclamation	30 Days	30 Days

### **PURPOSE OF NOTICE**

The purpose of the surface owner notice is to inform the surface owner about when and where the oil and gas operations are to take place so that the surface owner and tenant can make plans to coordinate their own land use with the oil and gas operations.

The COGCC rules require an oil and gas operator to ask the surface owner if he/she wants to be consulted about the timing of the operations and the locations of the wellsite and access road, as well as the final reclamation operations. In addition, the COGCC Onsite Inspection Policy requires an oil and gas operator to provide the surface owner with a copy of the Onsite Inspection Policy and an Onsite Inspection Request Form, along with the Rule 305 surface owner notification. (See “Onsite Inspections” on page 4.)

### **SURFACE TENANT NOTIFICATION (Rule 305.e.)**

It is the surface owner's responsibility to notify the surface tenant about the proposed oil and gas operations.

### **SURFACE OWNER CONSULTATION (Rule 306)**

The oil and gas operator is required to offer to consult with the surface owner about the locations of wellsites and access roads, and about final reclamation. ***The operator has no obligation to consult with a surface tenant unless the surface owner appoints a tenant for consultation.***

Local government representatives may also participate in the consultation about wellsite and access road locations if they desire. Local governments receive notice of wells to be drilled if they request to participate in the COGCC local governmental designee program.

### **ONSITE INSPECTIONS**

On lands where the surface owner did not execute a lease or is not party to a surface use agreement, the surface owner may request the COGCC to conduct an onsite inspection with the surface owner and the oil and gas operator. Local government representatives may also participate if desired by the surface owner. The purpose of the inspection is to determine if technical or operational conditions should be attached to the permit to avoid potential unreasonable loss of crops or land, to address issues regarding health, safety, welfare or environmental impacts, and to ensure compliance with COGCC rules regarding advance notice and good faith consultation.

***The onsite inspection will not address matters of surface owner compensation, diminution of property values, future property use, or other private party contractual issues between the operator and the surface owner.*** Please see the COGCC Onsite Inspection Policy for details about requesting an onsite inspection

#### **SITE PREPARATION - FENCING (Rule 1002.a.)**

**On all lands:** *At the surface owner's request*, and where livestock is in the immediate area, the operator is required to fence the drilling mud reserve pit on wells that are being drilled, and the wellhead, pit, and production equipment on producing wells.

**On Crop Land:** *At the surface owner's request*, the oil and gas operator is required to mark the boundaries of drillsites and access roads with berms, single strand fences, or other equivalent methods to minimize surface disturbance.

#### **SOIL SEGREGATION WHILE EXCAVATING (Rule 1002.b.)**

**On Crop Land:** While performing all excavations, the oil and gas operator is required to segregate all A (topsoil), B, and C soil horizons, and stockpile each of these soils separately. Deeper soil horizons are segregated to a depth of six feet.

**On Non-Crop Land:** The A (topsoil) horizon, or the top six inches of soil (whichever is deeper) is required to be segregated and stockpiled separately at all excavation

*If soil horizons are too rocky or too thin to segregate, the topsoil is segregated as much as possible and stored separately. On crop land, other deeper soil layers are segregated as much as possible to a depth of three (3) feet.*

#### **MINIMIZING SURFACE DISTURBANCE DURING DRILLING OPERATIONS (Rule 1002.e.)**

**On all lands:** Drilling locations are required to be designed and constructed in a manner that minimizes the total disturbed area. Steep slopes are to be avoided where possible, and deep cut and fills are to be constructed to the least possible slope. Existing access roads are to be used where possible, and oil and gas operators are encouraged to share access roads when developing a field. Operators are required to limit their travel to within original access road boundaries to reduce land damage.

### ***RECLAMATION BEGINS SOON AFTER A WELL IS DRILLED AND COMPLETED (Rule 1003)***

After a well is drilled, all areas which were disturbed by the drilling operations, and which are not needed for production operations, are to be reclaimed as close to their original condition as possible.

This "interim reclamation" is required to take place:

**On Crop Land:** No later than three (3) months after a well is completed.

**On Non-Crop Land:** No later than twelve (12) months after a well is completed.

**On all lands:** Interim reclamation includes:

- removing drilling waste materials and filling of pits and holes;
- removing compaction from the soil in areas no longer needed for oil and gas operations by cross-ripping the soil to a depth of eighteen (18) inches;
- closing drilling pits by drying out the pit and backfilling it by replacing the soil layers in their original positions;
- subsidence over the closed drilling pit is required to be corrected by the operator for two (2) years following pit closure by adding additional topsoil.

**On Crop Land:** Additional interim reclamation requirements include:

- guy line anchors for drilling and completion rigs are to be removed if requested;
- all bentonite drilling fluid is to be removed from the drilling pit before drying, and a minimum backfill cover of three (3) feet must be placed over any remaining contents in the pit;
- subsidence over any reclaimed area, including a closed drilling pit, is required to be corrected by the oil and gas operator by adding additional topsoil during the life of the well.

### ***INTERIM RESTORATION AND REVEGETATION (Rule 1003)***

**On all lands:** The oil and gas operator is required to replace all soils to their original positions and contour, and to adequately till the soil.

**On Crop Land:** The operator is required to prevent weeds and erosion, and to re-establish perennial crops that were present before drilling.

**On Non-Crop Land:** The operator is required to re-seed the disturbed area in the first favorable season. Re-seeding is done according to a surface owner agreement or in consultation with the local soil conservation district in the absence of an agreement. Re-seeding with a species consistent with the adjacent plant community is encouraged.

### ***FINAL RECLAMATION (Rule 1004)***

Final reclamation takes place after oil and gas wells are plugged and abandoned. All final reclamation work is required to be completed:

**On Crop Land:** No later than three (3) months after a well is plugged and abandoned.

**On Non-Crop Land:** No later than twelve (12) months after a well is plugged and abandoned.

**On all lands:** An oil and gas operator is required to

- remove all production equipment and debris;
- remove or treat any remaining production waste or contamination from spills or releases following COGCC rules;
- backfill all production pits by replacing the soils in their original positions;
- correct subsidence over closed production pit locations by adding additional topsoil;
- close access roads to plugged and abandoned wells and associated facilities;
- re-grade and re-contour the wellsite and access roads;
- perform compaction removal, restoration, and revegetation on wellsites and access roads to the same standards as those for interim reclamation on both Crop Land and Non-Crop Land;
- comply with all COGCC rules unless a surface owner waiver or Commission variance is obtained.

### ***FLOWLINE INSTALLATION, MAINTENANCE, RECLAMATION, AND ABANDONMENT (Rule 1101)***

**On all lands:**

- All oil and gas well flowlines are required to be buried deep enough to protect them from damage.
- Flowlines may be installed above ground if certain difficult conditions prevent burial or by agreement with the surface owner.

**On Crop Land:**

- Flowlines must be covered by a minimum of three (3) feet of soil unless prevented by certain difficult burial conditions, or the surface owner agrees to a shallower depth.
- When excavating trenches wider than twelve inches, the operator is required to segregate topsoil and backfill trenches to return the soils to their original positions and contour.
- Efforts are to be made to run flowlines parallel to crop irrigation rows on flood irrigated land.

### ***MAINTENANCE (Rule 1102)***

**On all lands:** Flowline trenches are to be maintained to correct subsidence and prevent erosion, with interim and final reclamation being

performed to the same standards as for wellsites and access roads. To prevent flowline leaks, flowlines are to be pressure tested upon installation, and then each year afterward.

#### ***FLOWLINE ABANDONMENT (Rule 1103)***

**On all lands:** When flowlines are abandoned:

- the lines are emptied of oil and gas;
- the lines are cut off below the ground surface;
- the lines are capped at the ends.

#### ***OIL AND GAS WELL AND TANK BATTERY SIGNS (Rule 210.b.)***

Oil and gas operators are required to post permanent signs at wells and tank batteries that identify the operator and provide location and emergency notification information. Signs must be posted within sixty (60) days after the COGCC approves a change of operator.

#### ***COGCC COMPLAINT PROCESS (Rule 522)***

If a surface owner or tenant has a complaint about an oil and gas operation, the COGCC encourages them to first contact the operator to see if a solution can be found that works for both parties. If no satisfactory solution can be found, a surface owner or tenant may file a complaint, preferably in writing on a COGCC Complaint Report Form (Form 18), with the COGCC. The COGCC staff includes field inspectors, engineers and environmental specialists who are available to investigate complaints and take enforcement action if rule violations are found. If the COGCC enforcement process does not adequately address a surface owner or tenant complaint, an application can be filed for a Commission hearing.

#### ***COGCC HEARING APPLICATION PROCESS (Rules 503 and 522.c.)***

Surface owners and tenants may file an application for hearing before the Commission for the following purposes:

- to seek a variance from the COGCC Rules if the Director does not grant a variance request administratively
- to seek an Order Finding Violation if they object to the COGCC staff's formal resolution of their complaint

Applications for Commission hearings are required to include a written description of the requested relief and the factual grounds for the relief. All hearing applications are to be filed at least fifty (50) days in advance of the desired hearing date. No application fee is required. Contact the COGCC Hearings Manager for further information on hearing application procedures.

The COGCC has offices located throughout the state:

Main Office: 1120 Lincoln Street, Suite 801  
Denver, CO 80203  
(303) 894-2100 - phone  
(303) 894-2109 - fax  
Toll-free Complaint Line to Denver:  
(888) 235-1101

Greeley: (970) 506-9834 – phone  
Sterling: (970) 522-6747 – phone  
Trinidad: (719) 846-4715 – phone  
Parachute: (970) 285-5661 – phone  
Parachute: (970) 285-9000 – phone  
Durango: (970) 259-4587 – phone  
Broomfield: (303) 469-1902 – phone  
De Beque: (970) 283-8635 – phone

Visit the COGCC Website at:

[www.oil-gas.state.co.us](http://www.oil-gas.state.co.us)

Information available on the website includes:

- COGCC Rules and Regulations and the Oil and Gas Conservation Act
- COGCC Onsite Inspection Policy
- COGCC Staff Contact Information
- A listing of Local Governmental Designees
- A listing of all pending and approved Applications-to-Drill
- A calendar of COGCC hearings
- The COGCC Information System including a Geographic Information System (GIS) Map interface
- Typical Questions from the Public About Oil and Gas Development



## COLORADO OIL AND GAS CONSERVATION COMMISSION

### RULE 306. CONSULTATION.

In locating roads, production facilities and well sites, and in preparation for reclamation and final abandonment, the operator shall use its best efforts to consult in good faith with the affected surface owner, or the surface owner's appointed tenant as provided for in Rule 305. Consultation with local governmental designees is addressed in Rule 306.a. (3) below. The following shall apply to each such consultation:

a. **Drilling consultation.** The good faith effort to consult shall occur at a time mutually agreed to by the parties prior to the commencement of operations with heavy equipment upon the lands of the surface owner. The operator shall confirm that the surface owner consultation requirements of this Rule 306. have been completed or waived before the Director approves an Application for Permit-to-Drill, Form 2.

(1) **Information provided by operator.** When consulting with the surface owner or appointed tenant, the operator shall furnish a description or diagram of the proposed drilling location; dimensions of the well site; and, if known, the location of associated production or injection facilities, pipelines, roads and any other areas to be used for oil and gas operations (if not previously furnished to such surface owner or if different from what was previously furnished).

(2) **Good faith consultation.** Such good faith consultation shall allow the surface owner or appointed tenant the opportunity to provide comments to the operator regarding preferences for the timing of oil and gas operations and preferred locations for wells and associated facilities.

(3) **Local government consultation.** Local governments which have appointed a local governmental designee and have indicated to the Director a desire for onsite consultation shall be given an opportunity to engage in such consultation concerning the location of roads, production facilities and well sites prior to the commencing of operations with heavy equipment.

b. **Final reclamation consultation.** In preparing for final reclamation and plugging and abandonment, the operator shall use its best efforts to consult in good faith with the affected surface owner (or the tenant when the surface owner has requested that such consultation be made with the tenant). Such good faith consultation shall allow the surface owner (or appointed tenant) the opportunity to provide comments concerning preference for timing of such operations and all aspects of final reclamation.

c. **Tenants.** Operators shall have no obligation to consult with tenant farmers, lessees, or any other party ("tenant") that may own or have an interest in any crops or surface improvements that could be affected by the proposed operation unless the surface owner appoints such tenant for such purposes. Nothing shall prevent the surface owner from including the tenant during the consultation. 300-7 as of May 30, 2008

d. **Waiver.** The requirement to consult with the surface owner under this Rule 306 may be waived by the affected surface owner or the surface owner's appointed tenant at any time.

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**LOCATED IN MOFFAT COUNTY, COLORADO**  
**SECTION 15, T8N, R9W, 6th P.M.**



PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW FROM BEGINNING OF PROPOSED ACCESS

CAMERA ANGLE: SOUTHEASTERLY



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Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**LOCATION PHOTOS**

**02 12 13**

MONTH DAY YEAR

TAKEN BY: G.M. DRAWN BY: C.I. REV: 03-29-13 J.L.H.

**PHOTO  
P1**

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**LOCATED IN MOFFAT COUNTY, COLORADO**  
**SECTION 15, T8N, R9W, 6th P.M.**



PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: NORTHERLY



PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: EASTERLY



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Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813  
- Since 1964 -

LOCATION PHOTOS			02	12	13	PHOTO
TAKEN BY: G.M.	DRAWN BY: C.I.	REV: 03-29-13 J.L.H.	MONTH	DAY	YEAR	P2

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**LOCATED IN MOFFAT COUNTY, COLORADO**  
**SECTION 15, T8N, R90W, 6th P.M.**



PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: SOUTHERLY



PHOTO: VIEW OF LOCATION STAKES

CAMERA ANGLE: WESTERLY



- Since 1964 -

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Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

<b>LOCATION PHOTOS</b>	<b>02</b>	<b>12</b>	<b>13</b>	<b>PHOTO</b>
TAKEN BY: G.M.	MONTH	DAY	YEAR	<b>P3</b>

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**LOCATED IN MOFFAT COUNTY, COLORADO**  
**SECTION 15, T8N, R9W, 6th P.M.**



**PHOTO: VIEW OF REFERENCE AREA**

**CAMERA ANGLE: NORTHERLY**



**PHOTO: VIEW OF REFERENCE AREA**

**CAMERA ANGLE: EASTERLY**



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Uintah Engineering & Land Surveying  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**REFERENCE AREA  
PHOTOS**

**02 12 13**

**MONTH DAY YEAR**

**TAKEN BY: G.M. DRAWN BY: C.I. REV: 03-29-13 J.L.H.**

**PHOTO  
REF 1**

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**LOCATED IN MOFFAT COUNTY, COLORADO**  
**SECTION 15, T8N, R90W, 6th P.M.**



**PHOTO: VIEW OF REFERENCE AREA**

**CAMERA ANGLE: SOUTHERLY**



**PHOTO: VIEW OF REFERENCE AREA**

**CAMERA ANGLE: WESTERLY**



- Since 1964 -

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<b>REFERENCE AREA</b>	<b>02</b>	<b>12</b>	<b>13</b>	<b>PHOTO</b>
<b>PHOTOS</b>	MONTH	DAY	YEAR	
TAKEN BY: G.M.	DRAWN BY: C.I.	REV: 03-29-13 J.L.H.	REF2	

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**PROPOSED LOCATION:**  
**BULLDOG #10-24V-890, #10-34H-890,**  
**#10-24H-890, #15-21H-890 &**  
**#15-11H-890 (COMPLETION PIT)**

SEE TOPO "B"

T8N  
T7N

5.7 MI. +/-

1.5 MI. +/-

CRAIG 5.5 MI. +/-  
HIGHWAY 789

CR 22

**LEGEND:**

● PROPOSED LOCATION

**AXIA ENERGY**

BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890 (COMPLETION PIT)  
SECTION 15, T8N, R90W, 6th P.M.  
LOT 2



**ACCESS ROAD  
MAP**

**02 12 13**  
MONTH DAY YEAR

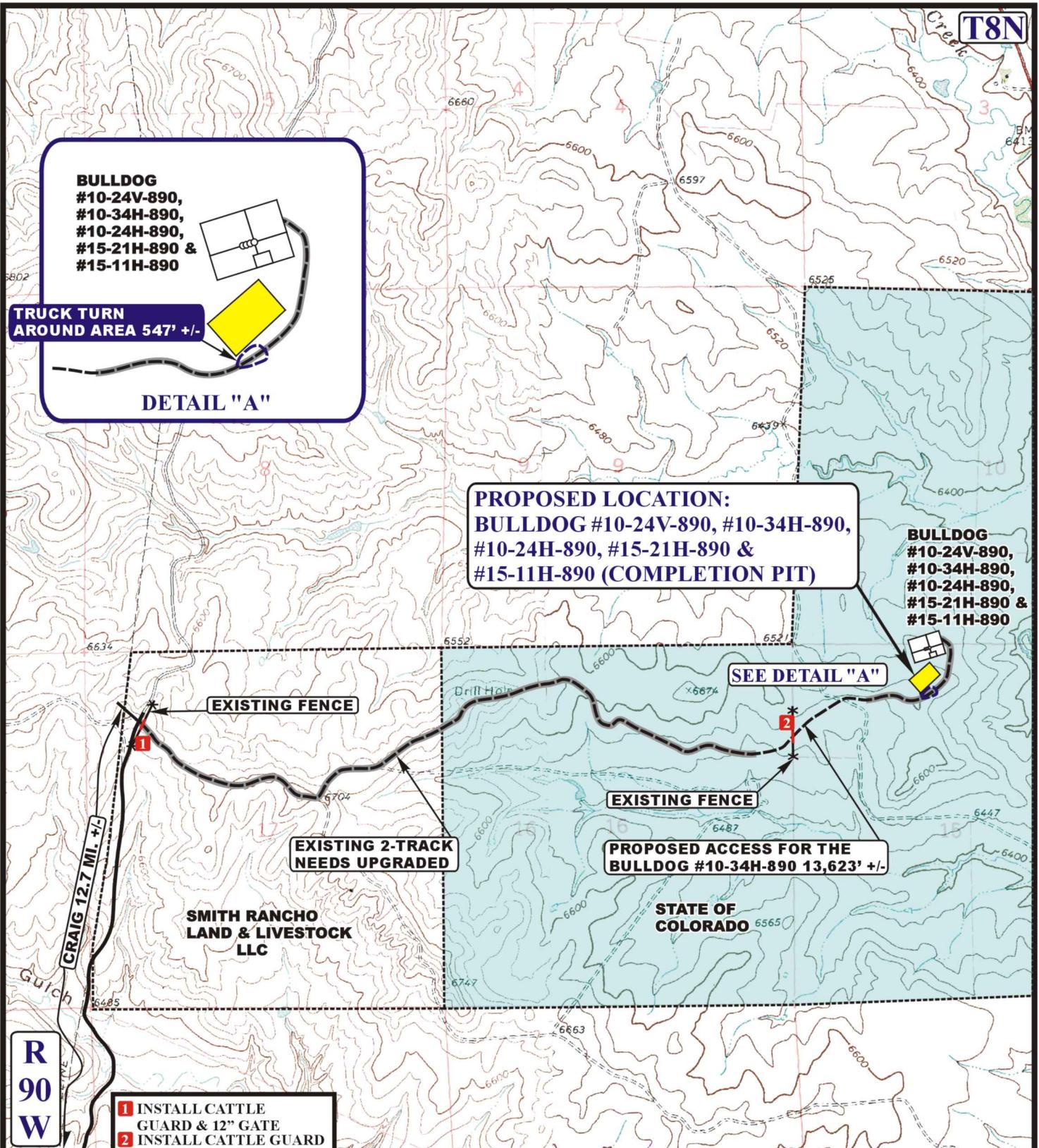
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**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

T8N

**LEGEND:**

- EXISTING ROAD
- - - PROPOSED ACCESS ROAD
- EXISTING 2-TRACK NEEDS UPGRADED
- \* \* \* \* EXISTING FENCE

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**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890, #15-21H-890 & #15-11H-890 (COMPLETION PIT)**  
**SECTION 15, T8N, R90W, 6th P.M.**  
**LOT 2**



**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813

**ACCESS ROAD MAP**

02 12 13  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REV: 03-29-13 J.L.H.

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**PROPOSED LOCATION:**  
**BULLDOG #10-24V-890, #10-34H-890,**  
**#10-24H-890, #15-21H-890**  
**& #15-11H-890**

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- ∅ DISPOSAL WELLS
- PRODUCING WELLS
- SHUT IN WELLS

- ABANDONED WELLS
- TEMPORARILY ABANDONED

**AXIA ENERGY**

**BULLDOG #10-24V-890, #10-34H-890,**  
**#10-24H-890, #15-21H-890 & #15-11H-890**  
**SECTION 15, T8N, R90W, 6th P.M.**  
**LOT 2**

**TOPOGRAPHIC**  
**MAP**

**02**  
**12**  
**13**

MONTH DAY YEAR

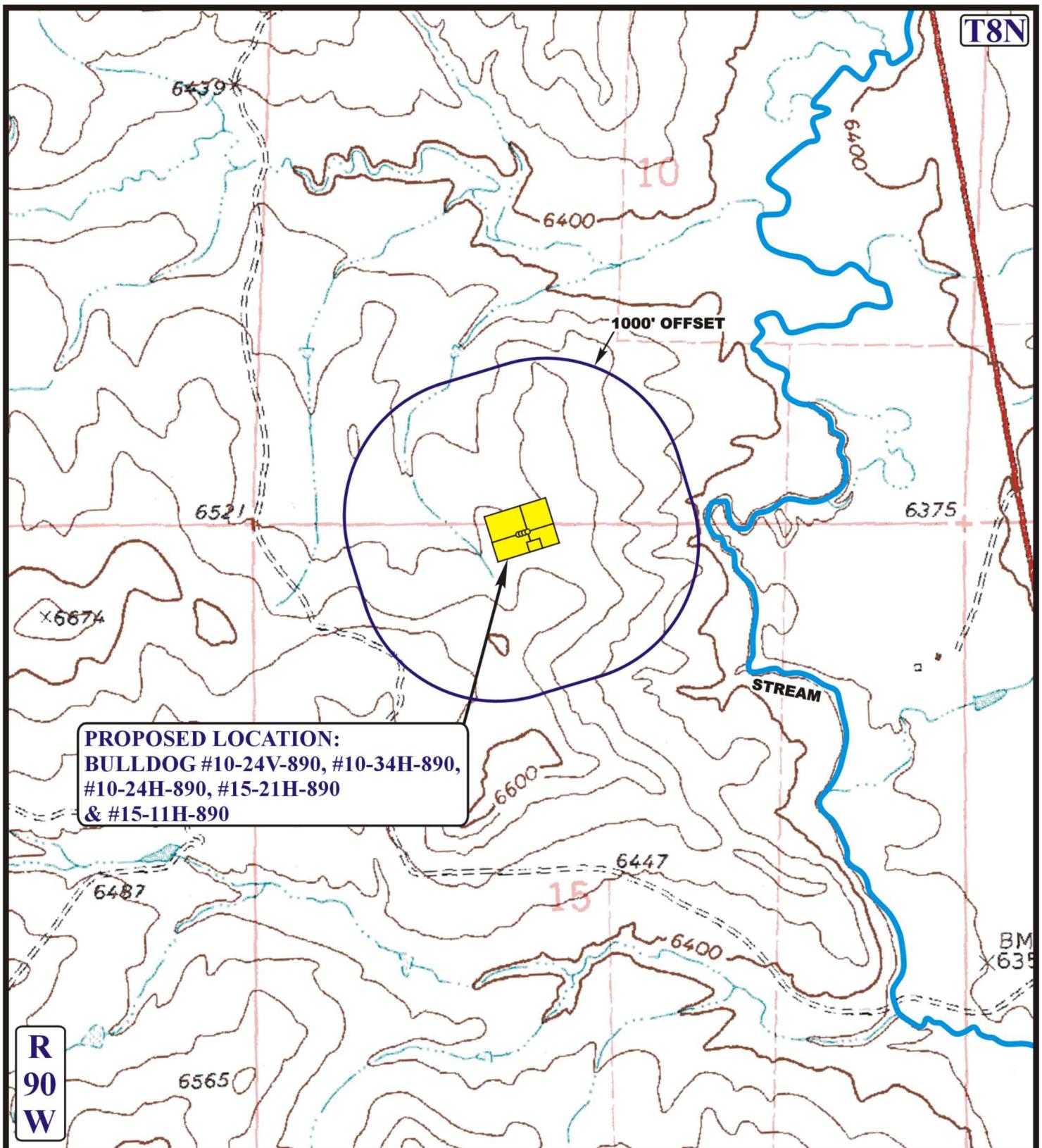
SCALE: 1" = 2000' DRAWN BY: C.I. REV: 03-29-13 J.L.H.

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**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

T8N

**LEGEND:**

EXISTING DRAINAGE

1000' OFFSET BOUNDARY



WATER WELL

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**AXIA ENERGY****BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,****#15-21H-890 & #15-11H-890****SECTION 15, T8N, R90W, 6th P.M.****LOT 2****HYDROLOGY  
MAP**

02

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13

MONTH

DAY

YEAR

SCALE: 1" = 1000'

DRAWN BY: C.I.

REV: 03-29-13 J.L.H.



**Uintah Engineering & Land Surveying**  
**85 South 200 East Vernal, Utah 84078**  
**(435) 789-1017 \* FAX (435) 789-1813**

T8N

**PROPOSED LOCATION:**  
**BULLDOG #10-24V-890, #10-34H-890,**  
**#10-24H-890, #15-21H-890**  
**& #15-11H-890**

**REFERENCE AREA**  
**LATITUDE 40.657067**  
**LONGITUDE 107.482156**

R  
90  
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**LEGEND:**

**AXIA ENERGY**

**BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890**  
**SECTION 15, T8N, R90W, 6th P.M.**  
**LOT 2**



**REFERENCE AREA  
MAP**

**02 12 13**  
MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: C.I. REV: 03-29-13 J.L.H.

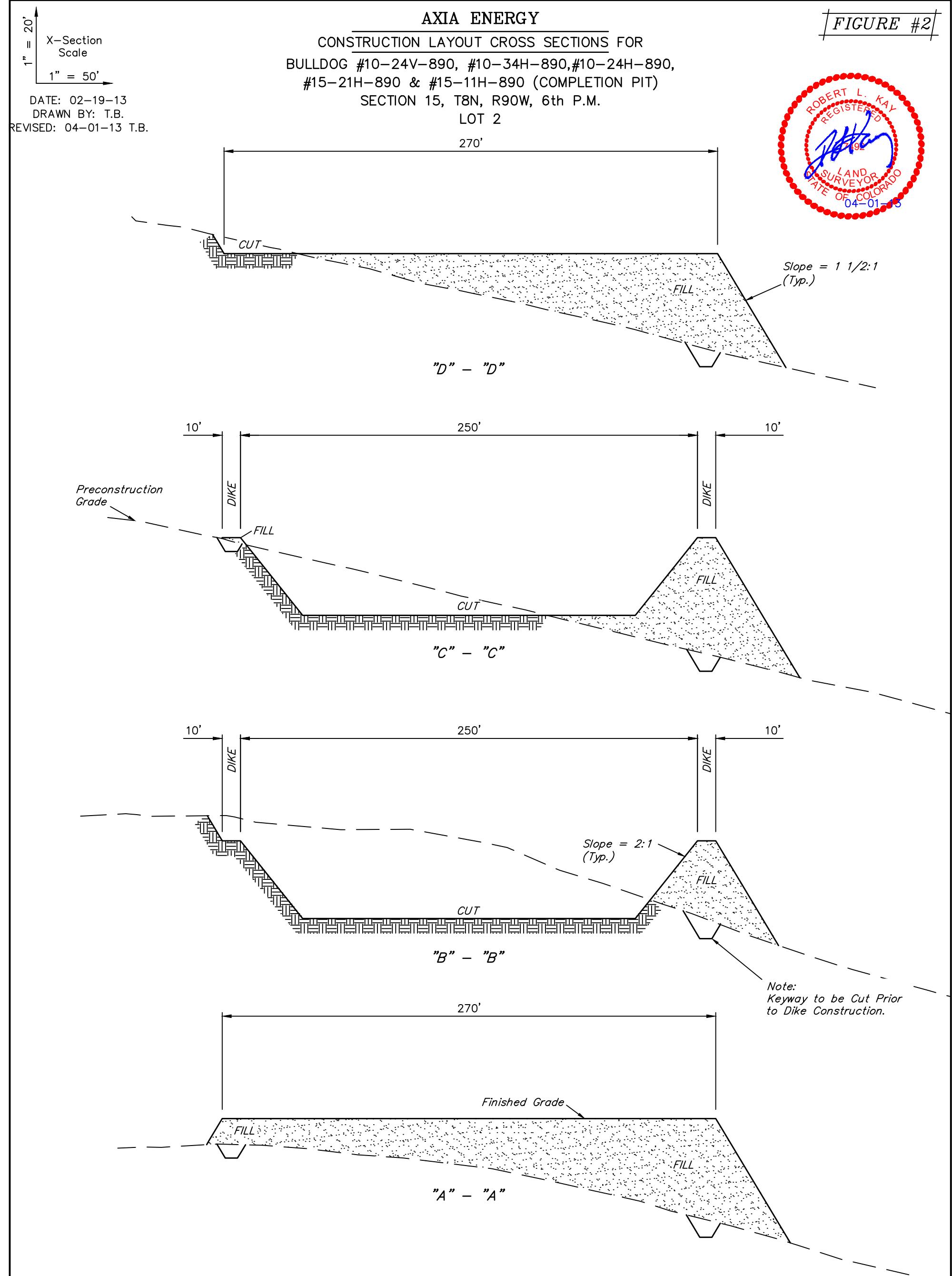
**REF  
TOPO**

**UELIS**

**Uintah Engineering & Land Surveying**  
85 South 200 East Vernal, Utah 84078  
(435) 789-1017 \* FAX (435) 789-1813



FIGURE #2

**NOTE:**

Topsoil should not be stripped below finished grade on substructure area.

\* **NOTE:**  
**FILL QUANTITY INCLUDES 5% FOR COMPACTION**

**COMPLETION PIT APPROXIMATE YARDAGES**

(6") Topsoil Stripping	= 2,700 Cu. Yds.
Remaining Location	= 25,790 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 28,490 CU. YDS.</b>
<b>FILL</b>	<b>= 25,790 CU. YDS.</b>

EXCESS MATERIAL	= 2,700 Cu. Yds.
Topsoil	= 2,700 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 0 Cu. Yds.

**COMPLETION PIT APPROXIMATE ACREAGES**  
**COMPLETION PIT DISTURBANCE = ± 3.515 ACRES**  
**PIT ACCESS ROAD DISTURBANCE = ± 0.388 ACRES**  
**TOTAL = ± 3.903 ACRES**

AXIA ENERGY

## RECLAMATION DIAGRAM FOR

BULLDOG #10-24V-890, #10-34H-890, #10-24H-890,  
#15-21H-890 & #15-11H-890 (COMPLETION PIT)  
SECTION 15, T8N, R90W, 6th P.M.  
LOT 2

SCALE: 1" = 50'  
DATE: 02-19-13  
DRAWN BY: T.B.  
REVISED: 04-01-13 T.B.

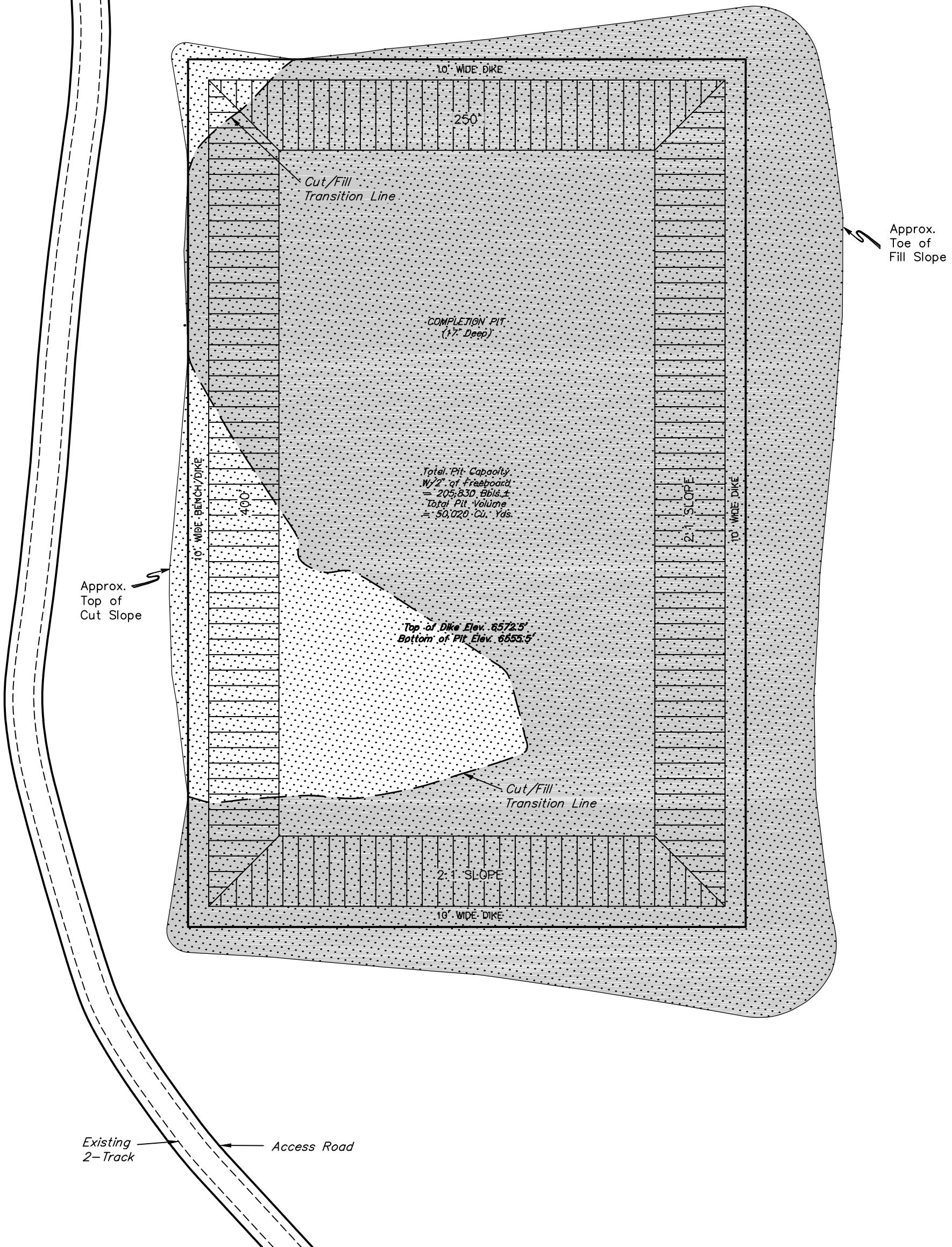
• 10 •

DATE: 02-19-13  
DRAWN BY: T B

DRAWN BY: T.B.  
VISFD: 04-01-13

VICEB. 31 31 13

CBT 1



APPROXIMATE ACREAGES  
RECLAIMED = ± 3.515 ACRES

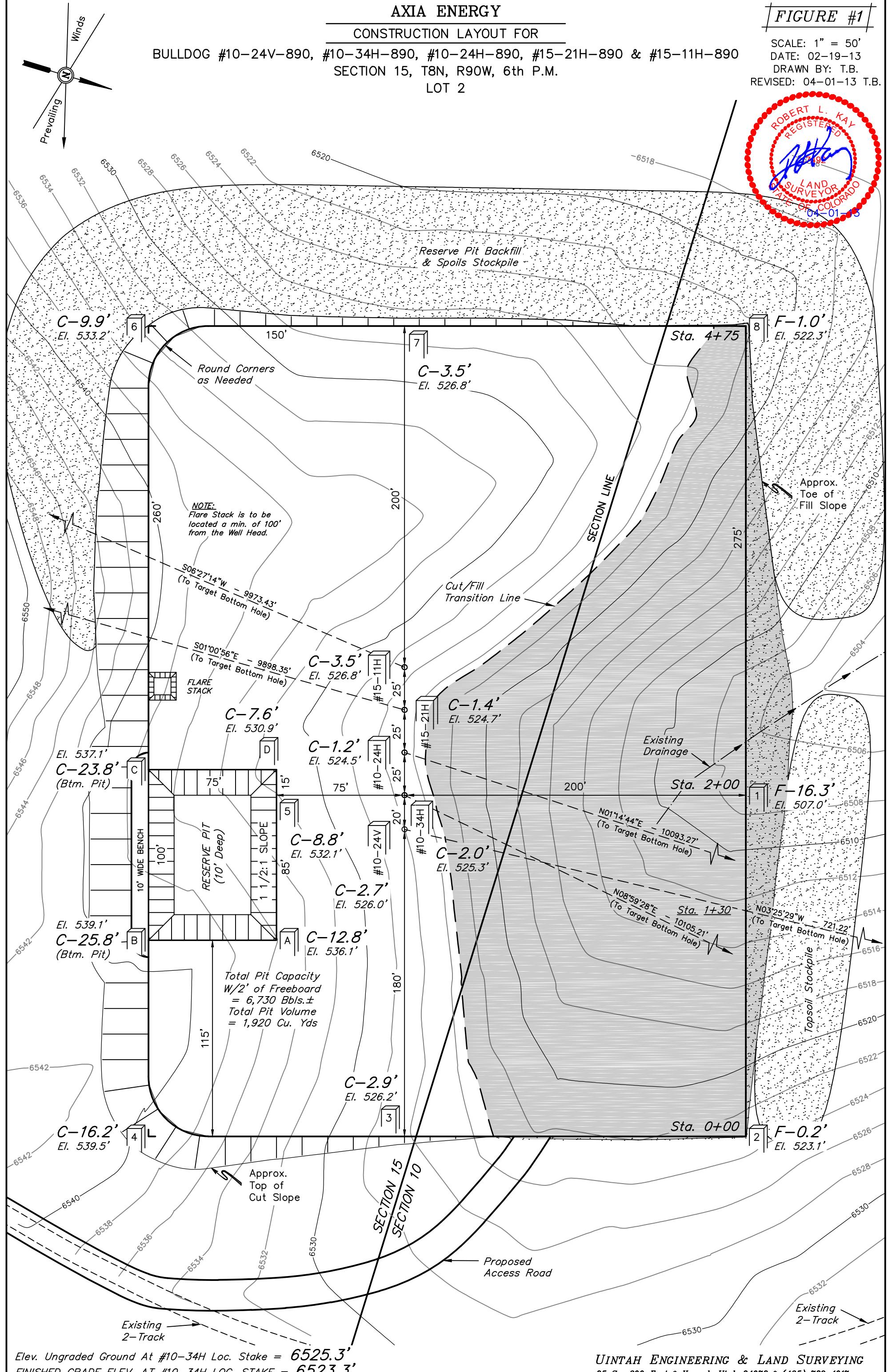
*UINTAH ENGINEERING & LAND SURVEYING*  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

AXIA ENERGY

## **CONSTRUCTION LAYOUT FOR**

BULLDOG #10-24V-890, #10-34H-890, #10-24H-890, #15-21H-890 & #15-11H-890  
SECTION 15, T8N, R90W, 6th P.M.  
LOT 2

SCALE: 1" = 50'  
DATE: 02-19-13  
DRAWN BY: T.B.  
REVISED: 04-01-13 T.B.



*Elev. Ungraded Ground At #10-34H Loc. Stake = 6525.3'  
FINISHED GRADE ELEV. AT #10-34H LOC. STAKE = 6523.3'*

*UINTAH ENGINEERING & LAND SURVEYING*  
85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017



AXIA ENERGY

CONSTRUCTION LAYOUT CROSS SECTIONS FOR  
890, #10-34H-890, #10-24H-890, #15-21H-890  
SECTION 15, T8N, R90W, 6th P.M.

LOT 2

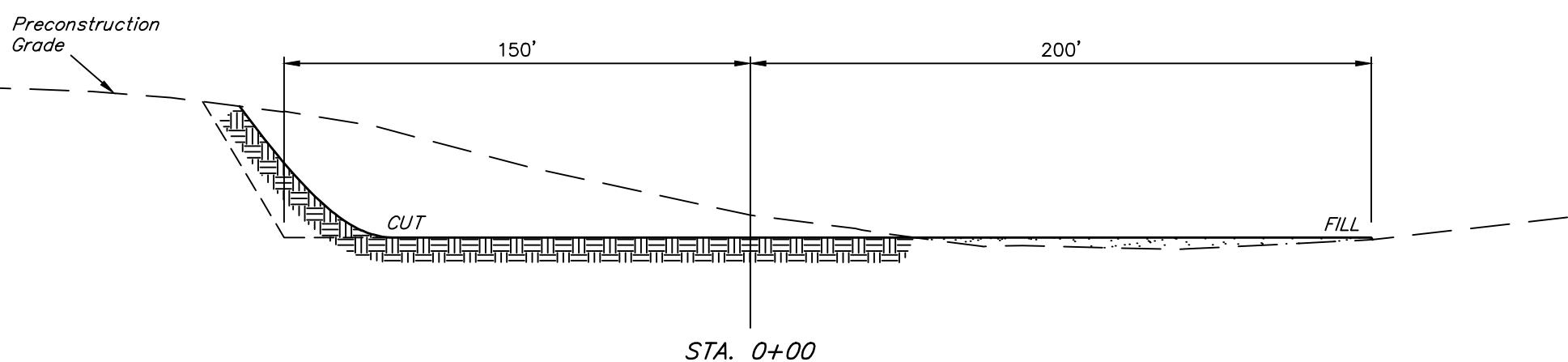
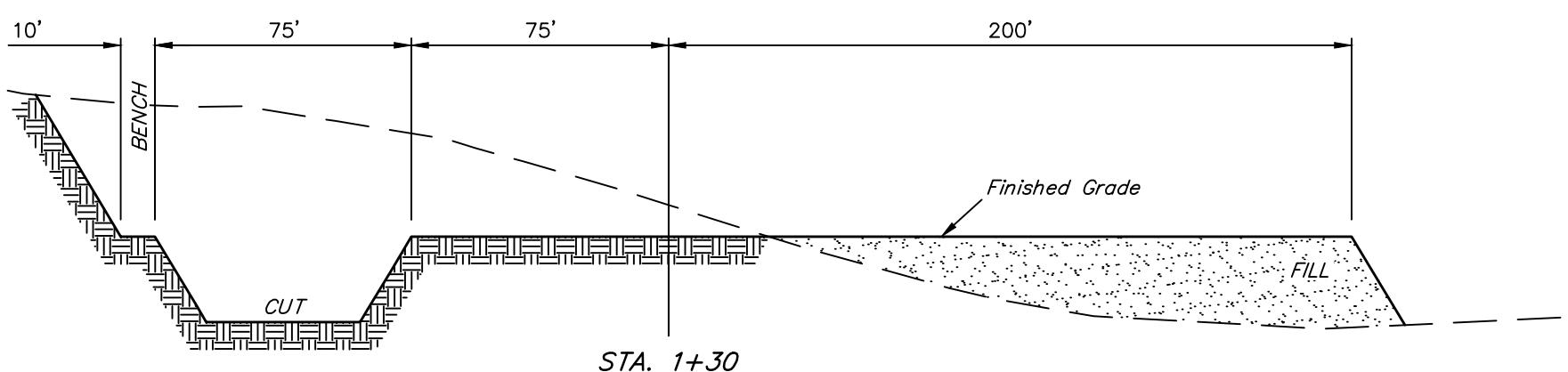
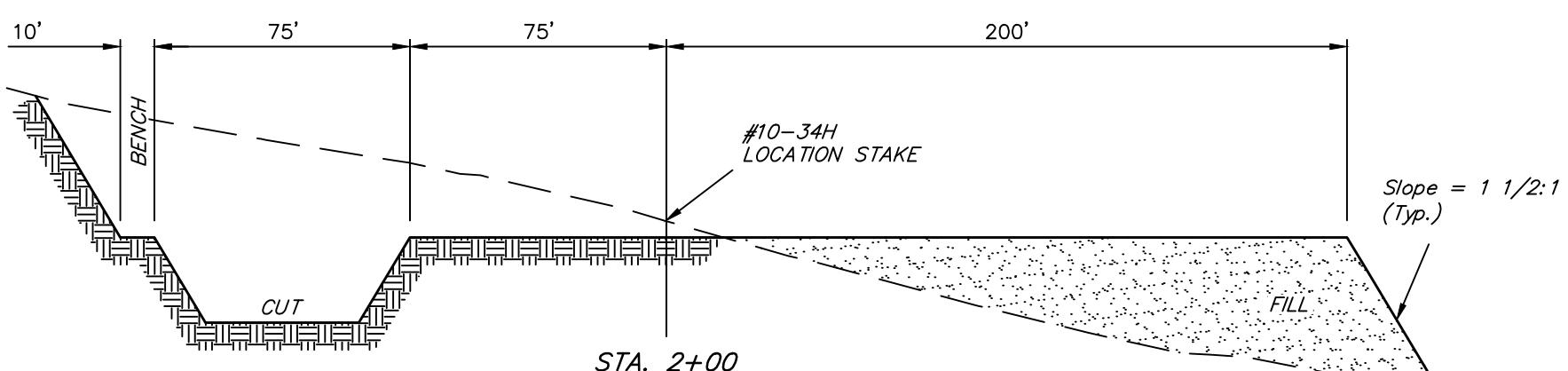
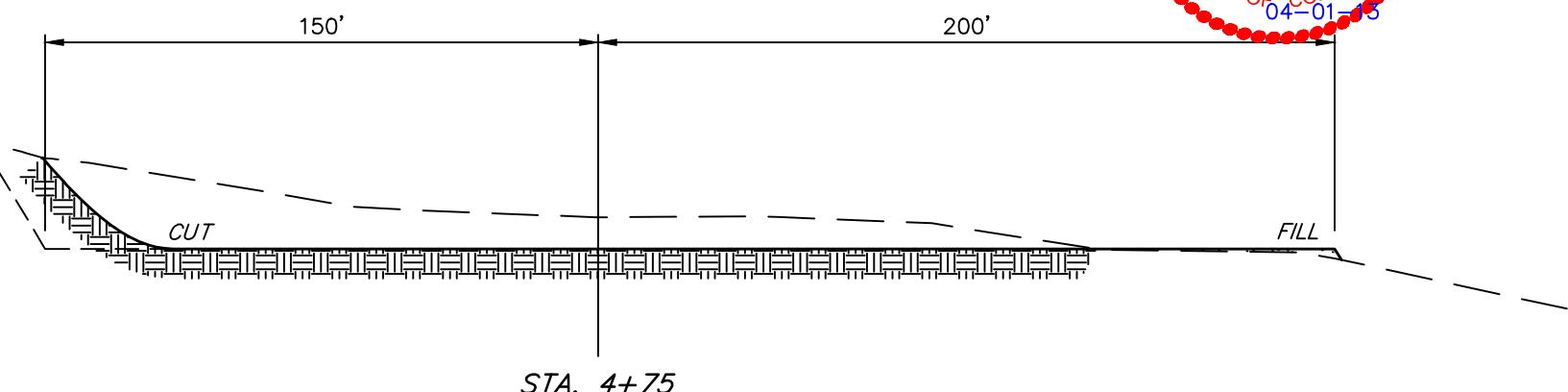
**FIGURE #2**

X-Section Scale  
1" = 50'

DATE: 02-19-13

DRAWN BY: T.B.

REVISED: 04-01-13 T.B.



**NOTE:**

**Topsoil should not be  
Stripped Below Finished  
Grade on Substructure Area.**

\* NOTE:  
FILL QUANTITY INCLUDES  
5% FOR COMPACTION

WELL PAD APPROXIMATE YARDAGES	
(6") Topsoil Stripping	= 3,550 Cu. Yds.
Remaining Location	= 37,180 Cu. Yds.
<b>TOTAL CUT</b>	<b>= 40,730 CU. YDS.</b>
<b>FILL</b>	<b>= 17,520 CU. YDS.</b>

EXCESS MATERIAL	= 23,210 Cu. Yds.
Topsoil & Pit Backfill (1/2 Pit Vol.)	= 4,510 Cu. Yds.
EXCESS UNBALANCE (After Interim Rehabilitation)	= 18,700 Cu. Yds.

WELL PAD APPROXIMATE ACREAGES  
WELL SITE DISTURBANCE = ± 5.721 ACRES  
ACCESS ROAD DISTURBANCE = ± 10.140 ACRES  
TOTAL = ± 15.861 ACRES

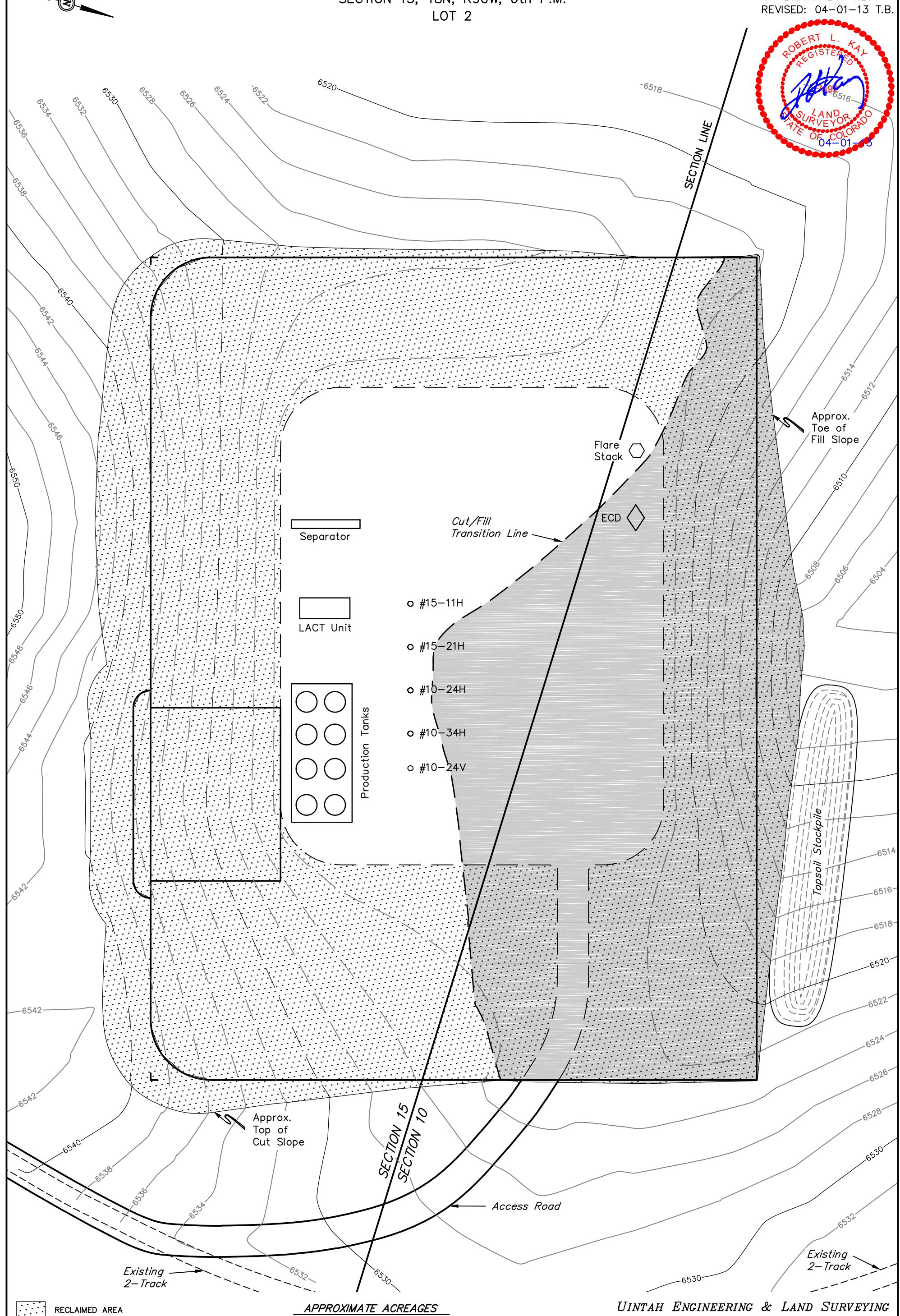
## AXIA ENERGY

## RECLAMATION DIAGRAM FOR

BULLDOG #10-24V-890, #10-34H-890, #10-24H-890, #15-21H-890 & #15-11H-890  
 SECTION 15, T8N, R9W, 6th P.M.  
 LOT 2

FIGURE #4

SCALE: 1" = 50'  
 DATE: 02-19-13  
 DRAWN BY: T.B.  
 REVISED: 04-01-13 T.B.



APPROXIMATE ACREAGES  
 UN-RECLAIMED = ± 1.430 ACRES

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 85 So. 200 East \* Vernal, Utah 84078 \* (435) 789-1017

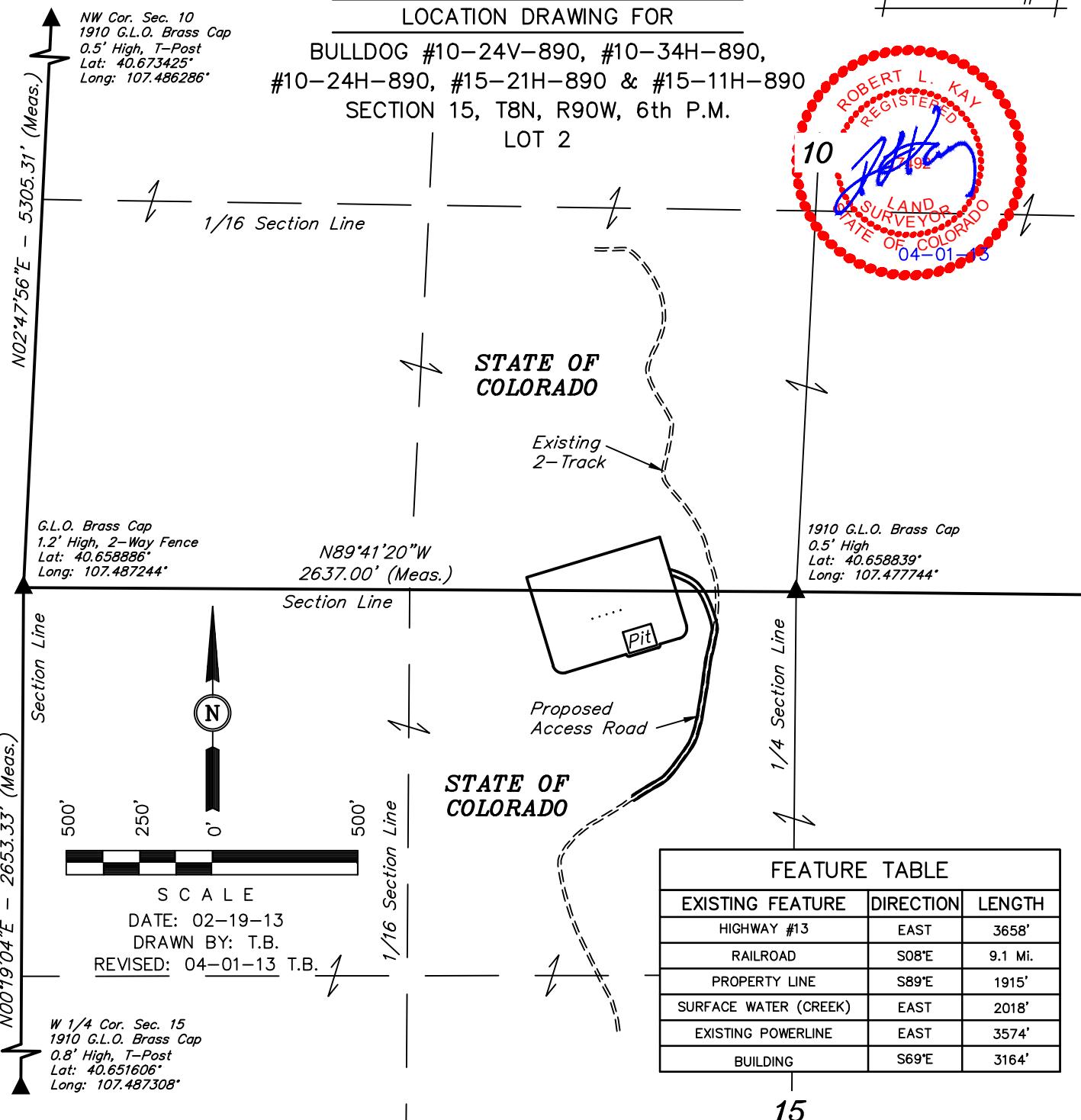
FIGURE #5

AXIA ENERGY

LOCATION DRAWING FOR

BULLDOG #10-24V-890, #10-34H-890,  
 #10-24H-890, #15-21H-890 & #15-11H-890  
 SECTION 15, T8N, R90W, 6th P.M.

LOT 2



PLANT COMMUNITY	
<input type="checkbox"/>	DISTURBED GRASSLAND
<input type="checkbox"/>	NATIVE GRASSLAND
<input type="checkbox"/>	SHRUB LAND
<input type="checkbox"/>	PLAINS RIPARIAN
<input type="checkbox"/>	MOUNTAIN RIPARIAN
<input type="checkbox"/>	FOREST LAND
<input type="checkbox"/>	WETLANDS AQUATIC
<input type="checkbox"/>	ALPINE
<input type="checkbox"/>	OTHER (Describe): _____

CURRENT LAND USE					
CROP LAND:	<input type="checkbox"/> IRRIGATED	<input type="checkbox"/> DRY LAND	<input type="checkbox"/> IMPROVED PASTURE	<input type="checkbox"/> HAY MEADOW	<input type="checkbox"/> CRP
NON-CROP LAND:	<input type="checkbox"/> RANGELAND	<input type="checkbox"/> TIMBER	<input type="checkbox"/> RECREATIONAL	<input type="checkbox"/> OTHER (Describe) _____	
SUBDIVIDED:	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> RESIDENTIAL		

FUTURE LAND USE					
CROP LAND:	<input type="checkbox"/> IRRIGATED	<input type="checkbox"/> DRY LAND	<input type="checkbox"/> IMPROVED PASTURE	<input type="checkbox"/> HAY MEADOW	<input type="checkbox"/> CRP
NON-CROP LAND:	<input type="checkbox"/> RANGELAND	<input type="checkbox"/> TIMBER	<input type="checkbox"/> RECREATIONAL	<input type="checkbox"/> OTHER (Describe) _____	
SUBDIVIDED:	<input type="checkbox"/> INDUSTRIAL	<input type="checkbox"/> COMMERCIAL	<input type="checkbox"/> RESIDENTIAL		

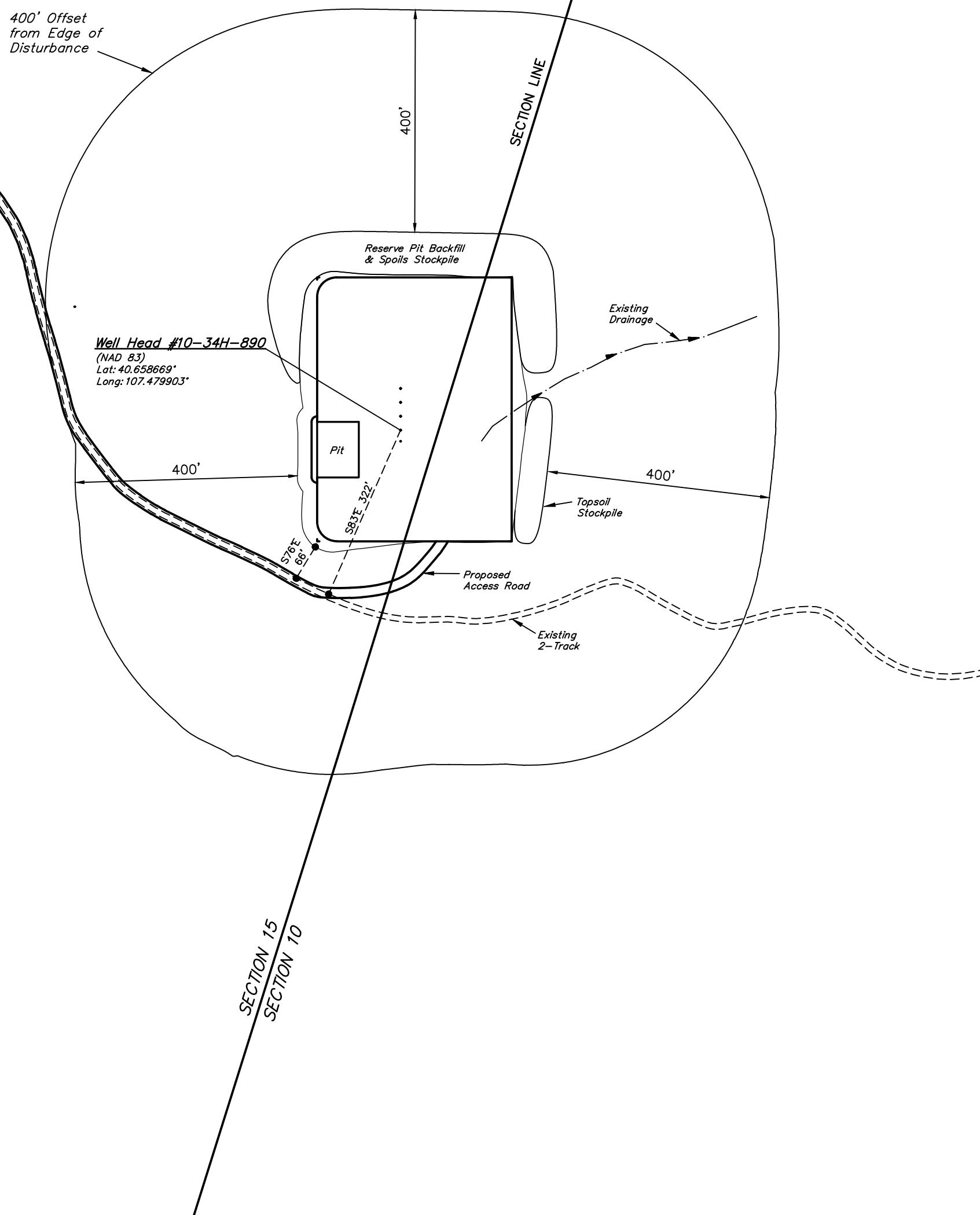
## AXIA ENERGY

## LOCATION DRAWING DETAIL FOR

BULLDOG #10-24V-890, #10-34H-890, #10-24H-890, #15-21H-890 & #15-11H-890  
 SECTION 15, T8N, R9W, 6th P.M.  
 LOT 2

FIGURE #5A

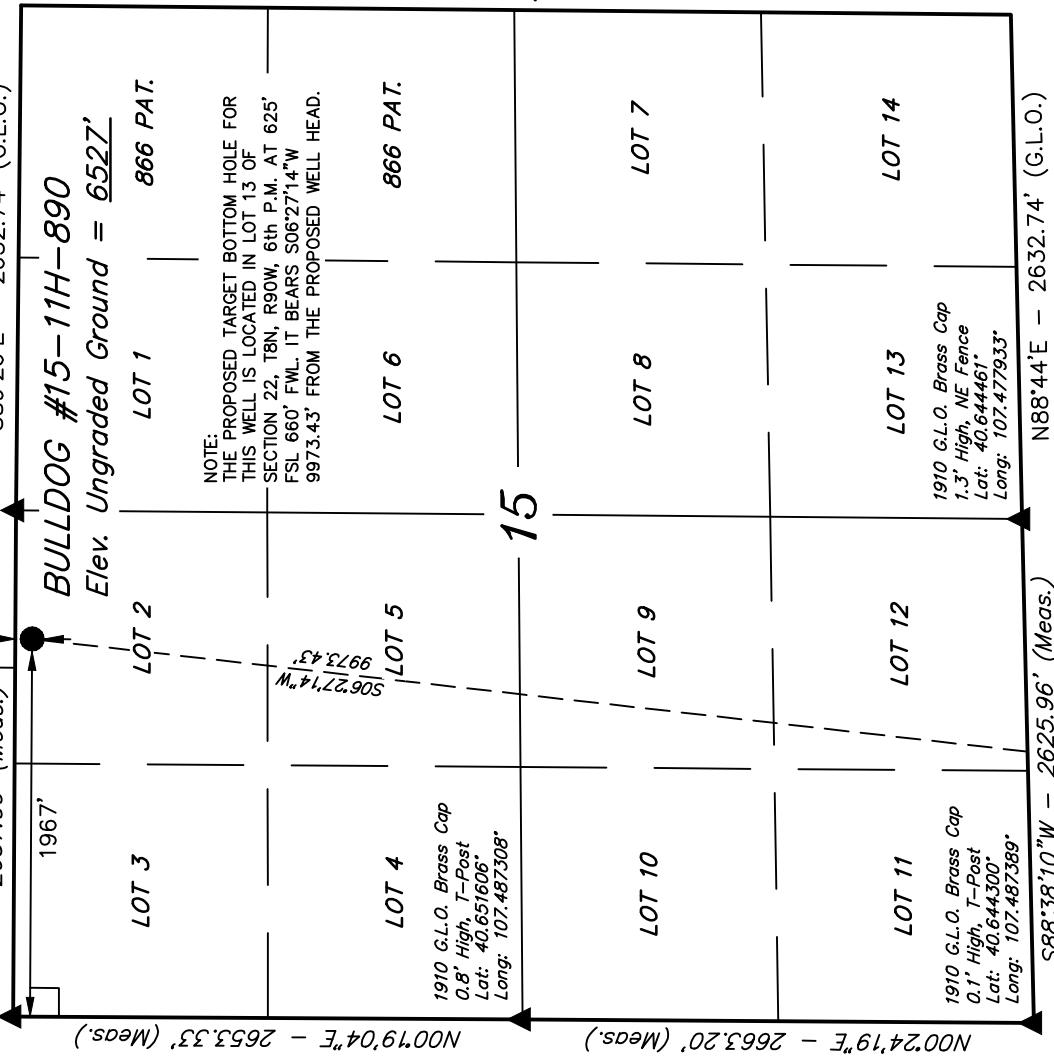
SCALE: 1" = 200'  
 DATE: 02-19-13  
 DRAWN BY: T.B.  
 REVISED: 04-01-13 T.B.



T8N, R9OW, 6th P.M.

G.L.O. Brass Cap  
1.2' High, 2-Way Fence  
Lat: 40.65886°  
Long: 107.497244°

Well location, BULLDOG #15-11H-890 (SURFACE LOCATION), located as shown in LOT 2 of Section 15, T8N, R9W, 6th P.M., Moffat County, Colorado.



*Target Bottom Hole*

LEGEND:

= 90° SYMBOL

**= PROPOSED WELL HEAD.**

100' = 1000'  
02-05-13 02-13-13

PARTY	G.M.	M.M.	T.B.	REFERENCES	G.L.O. PLAT
WEATHER				FILE	

RE FIELD. 30 31 32  
UNTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM  
FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY  
SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE  
BEST OF MY KNOWLEDGE AND BELIEF

*[Handwritten Signature]*

REGISTERED AND SURVEYOR  
REGISTRATION NO. 192  
STATE CO. OFF. 03-01-13  
3-01-13

CERTIFICATE

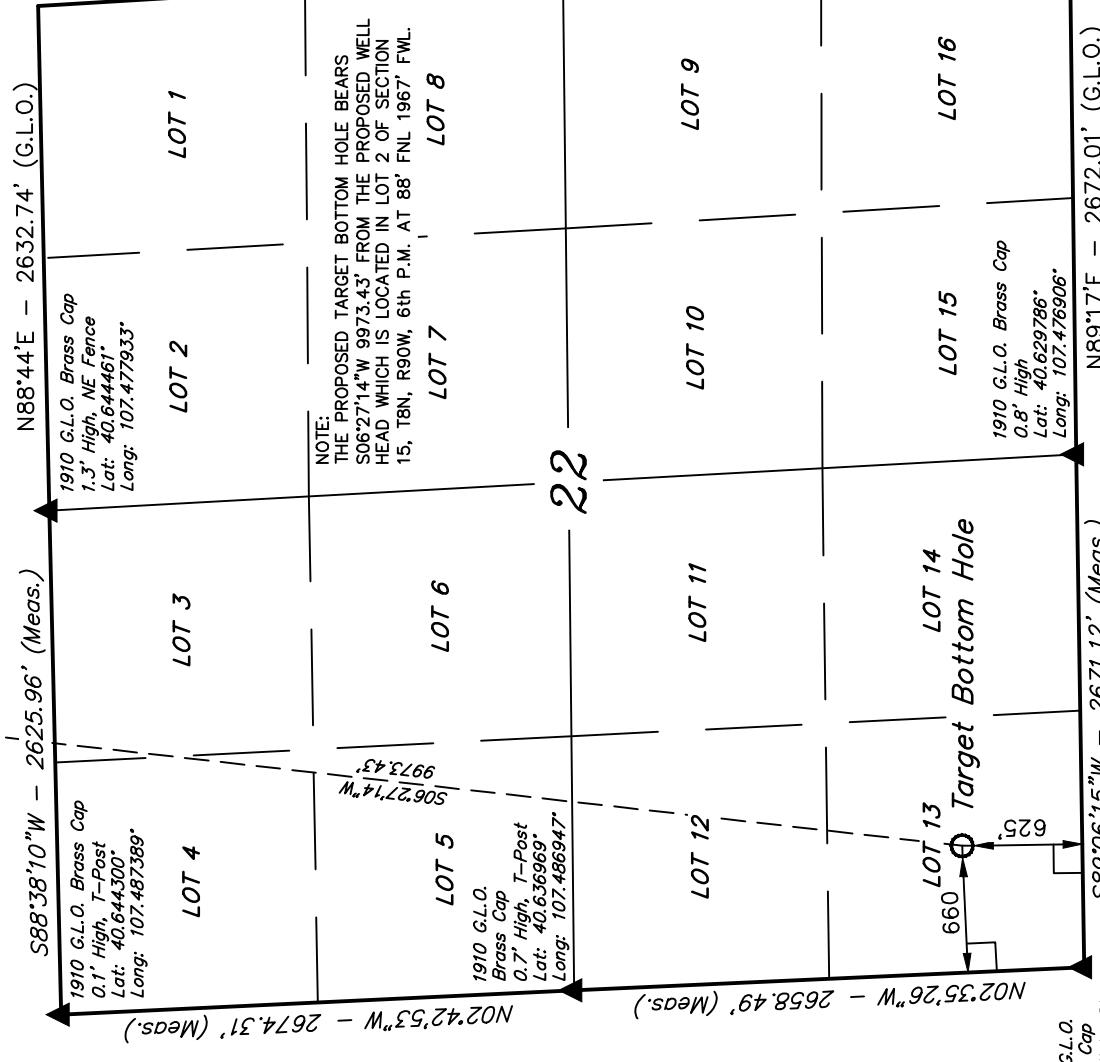
BASIS OF BEARINGS

**BASIS OF ELEVATION**

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R91W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUADRANGLE (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

AXIA ENERGY

# T8N, R90W, 6th P.M.



## AXIA ENERGY

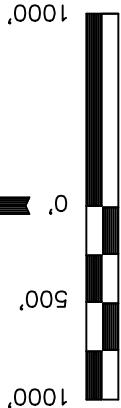
Well location, BULLDOG #15-11H-890 (TARGET BOTTOM HOLE), located as shown in LOT 13 of Section 22, T8N, R90W, 6th P.M., Moffat County, Colorado.

**BASIS OF ELEVATION**

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R91W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

**BASIS OF BEARINGS**

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



S C A L E

C E R T I F I C A T E

THIS IS TO CERTIFY THAT THE ABOVE LATITUDE AND LONGITUDE ARE MADE FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*[Handwritten signature]*

REGISTERED AND SURVEYOR  
REGISTRATION NUMBER 9201  
STATE OF COLORADO  
02-27-13

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

NAD 83 (TARGET BOTTOM HOLE)	SCALE	PARTY	DATE SURVEYED:	DATE DRAWN:
LATITUDE = 40°37'53.12" (40.631422)	1" = 1000'	G.M. M.M. T.B.	02-05-13	02-13-13
LONGITUDE = 107°29'03.29" (107.483628)				REFERENCES
NAD 27 (TARGET BOTTOM HOLE)				G.L.O. PLAT
LATITUDE = 40°37'53.22" (40.631450)				FILE
LONGITUDE = 107°29'01.06" (107.483628)				AXA ENERGY
STATE PLANE NAD 83				
N: 1479030.50 E: 2449299.24				
STATE PLANE NAD 27				
N: 479039.20 E: 144956.69				

- LEGEND:**
- 90° SYMBOL
  - PROPOSED WELL HEAD.
  - ▲ SECTION CORNERS LOCATED.

# T8N, R90W, 6th P.M.

G.L.O. Brass Cap  
1.2' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

1910 G.L.O. Brass Cap  
0.5' High  
Lat: 40.658839°  
Long: 107.477744°

2637.00' (Meas.)

N89°41'20" W

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 3

LOT 2

LOT 1

BULLDOG #15-21H-890

Elev. Ungraded Ground = 6525'

866 PAT.

NOTE:  
THE PROPOSED TARGET BOTTOM HOLE FOR  
THIS WELL IS LOCATED IN LOT 14 OF  
SECTION 22, T8N, R90W, 6th P.M. AT 625'  
FSL 1980' FWL. IT BEARS S0100056'E  
9898.35' FROM THE PROPOSED WELL HEAD.

LOT 4

LOT 5

LOT 6

LOT 7

LOT 8

LOT 9

LOT 10

LOT 11

LOT 12

LOT 13

LOT 14

LOT 15

1910 G.L.O. Brass Cap  
0.8' High, T-Post  
Lat: 40.651606°  
Long: 107.48308°

1910 G.L.O. Brass Cap  
1.3' High, NE Fence  
Lat: 40.644461°  
Long: 107.477933°

N88°44'E - 2632.74' (G.L.O.)

S88°38'10"W - 2625.96' (Meas.)

1910 G.L.O. Brass Cap  
0.1' High, T-Post  
Lat: 40.644300°  
Long: 107.487389°

N00°24'19"E - 2663.20' (Meas.)

N00°19'04"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 16

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 17

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 18

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 19

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 20

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 21

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 22

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 23

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 24

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 25

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 26

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 27

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 28

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 29

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 30

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 31

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 32

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 33

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 34

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 35

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 36

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 37

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

LOT 38

1910 G.L.O. Brass Cap  
0.5' High, 2-Way Fence  
Lat: 40.658866°  
Long: 107.487244°

2637.00' (Meas.)

1991'

N00°19'04"E - 2663.20' (Meas.)

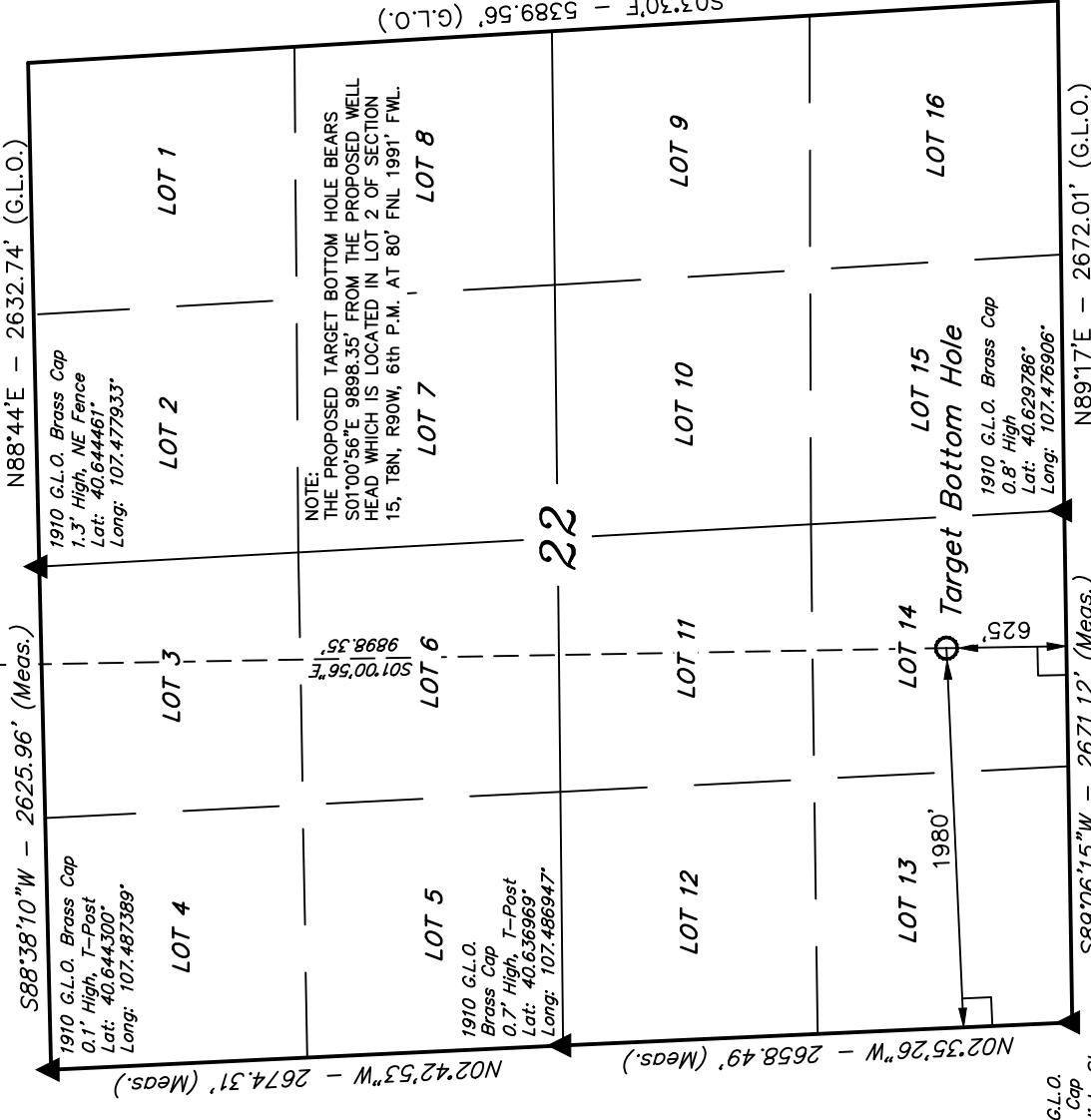
N00°24'19"E - 2653.33' (Meas.)

9898.35'

5010.00,56,E

# T8N, R90W, 6th P.M.

● Surface Location



## AXIA ENERGY

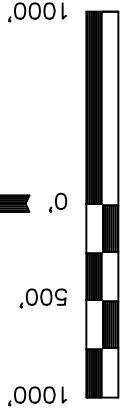
Well location, BULLDOG #15-21H-890 (TARGET BOTTOM HOLE), located as shown in LOT 14 of Section 22, T8N, R90W, 6th P.M., Moffat County, Colorado.

### BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R9W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

### BASIS OF ELEVATION

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



### S C A L E

### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE LATITUDE AND LONGITUDE ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
L. J. H. [Signature]  
REGISTERED SURVEYOR  
REGISTRATION NO. 9202713  
STATE OF COLORADO  
02-27-13

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

NAD 83 (TARGET BOTTOM HOLE)	SCALE	PARTY	DATE SURVEYED:	DATE DRAWN:
LATITUDE = 40°37'53.30" (40.631472)	1" = 1000'	G.M. M.M. T.B.	02-05-13	02-13-13
LONGITUDE = 107°28'46.17" (107.479492)				REFERENCES
NAD 27 (TARGET BOTTOM HOLE)				G.L.O. PLAT
LATITUDE = 40°37'53.41" (40.631503)				FILE
LONGITUDE = 107°28'43.94" (107.478872)				AXIA ENERGY
STATE PLANE NAD 83				
N: 1479019.85 E: 2450619.33				
STATE PLANE NAD 27				
N: 479018.54 E: 1450776.78				

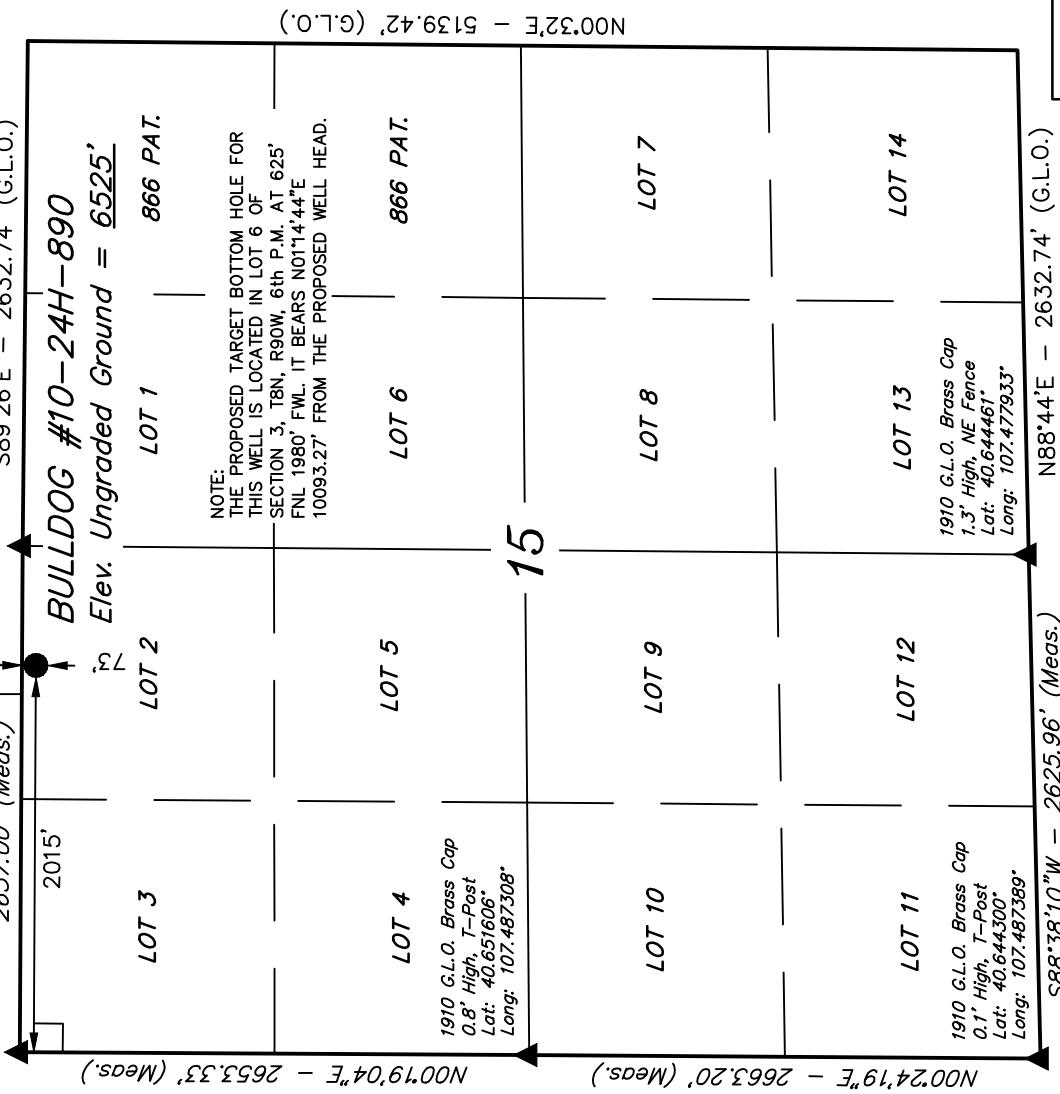
LEGEND:  
= 90° SYMBOL  
● = PROPOSED WELL HEAD.  
▲ = SECTION CORNERS LOCATED.

# Target Bottom Hole ♀ T8N, R90W, 6th P.M.

G.L.O. Brass Cap  
1.2' High, 2-Way Fence  
Lat: 40.65886° Long: 107.48244°  
N89°41'20"W 2637.00' (Meas.)

1910 G.L.O. Brass Cap  
0.5' High  
Lat: 40.658839° Long: 107.477744°

N00°24'19"E - 2663.20' (Meas.)



# AXIA ENERGY

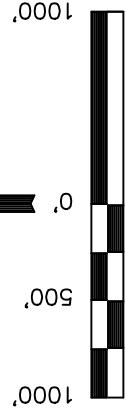
Well location, BULLDOG #10-24H-890 (SURFACE LOCATION), located as shown in LOT 2 of Section 15, T8N, R90W, 6th P.M., Moffat County, Colorado.

## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R91W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

## BASIS OF ELEVATION

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



## S C A L E

## C E R T I F I C A T E

THIS IS TO CERTIFY THAT THE ABOVE LATITUDE AND LONGITUDE ARE CORRECTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*[Handwritten signature]*

REGISTERED AND SURVEYOR  
REGISTRATION NO. 92013  
STATE OF COLORADO  
03-01-13

REVISED: 03-01-13

**UINTAH ENGINEERING & LAND SURVEYING**  
(435) 789-1017

NAD 83 (SURFACE LOCATION)		SCALE	DATE SURVEYED:	DATE DRAWN:
LATITUDE	= 40°39'31.14"	(40.658650)	02-05-13	02-13-13
LONGITUDE	= 107°28'47.96" (107.479989)			
NAD 27 (SURFACE LOCATION)		1" = 1000'		
LATITUDE	= 40°39'31.25" (40.658681)	PARTY		REFERENCES
LONGITUDE	= 107°28'45.75" (107.479369)	G.M. M.M. T.B.		G.L.O. PLAT
STATE PLANE NAD 83		WEATHER		FILE
N: 1488921.38 E: 2450702.53		COLD		AXA ENERGY
STATE PLANE NAD 27				
N: 488920.01 E: 1450859.95				

## LEGEND:

— 90° SYMBOL

● = PROPOSED WELL HEAD.

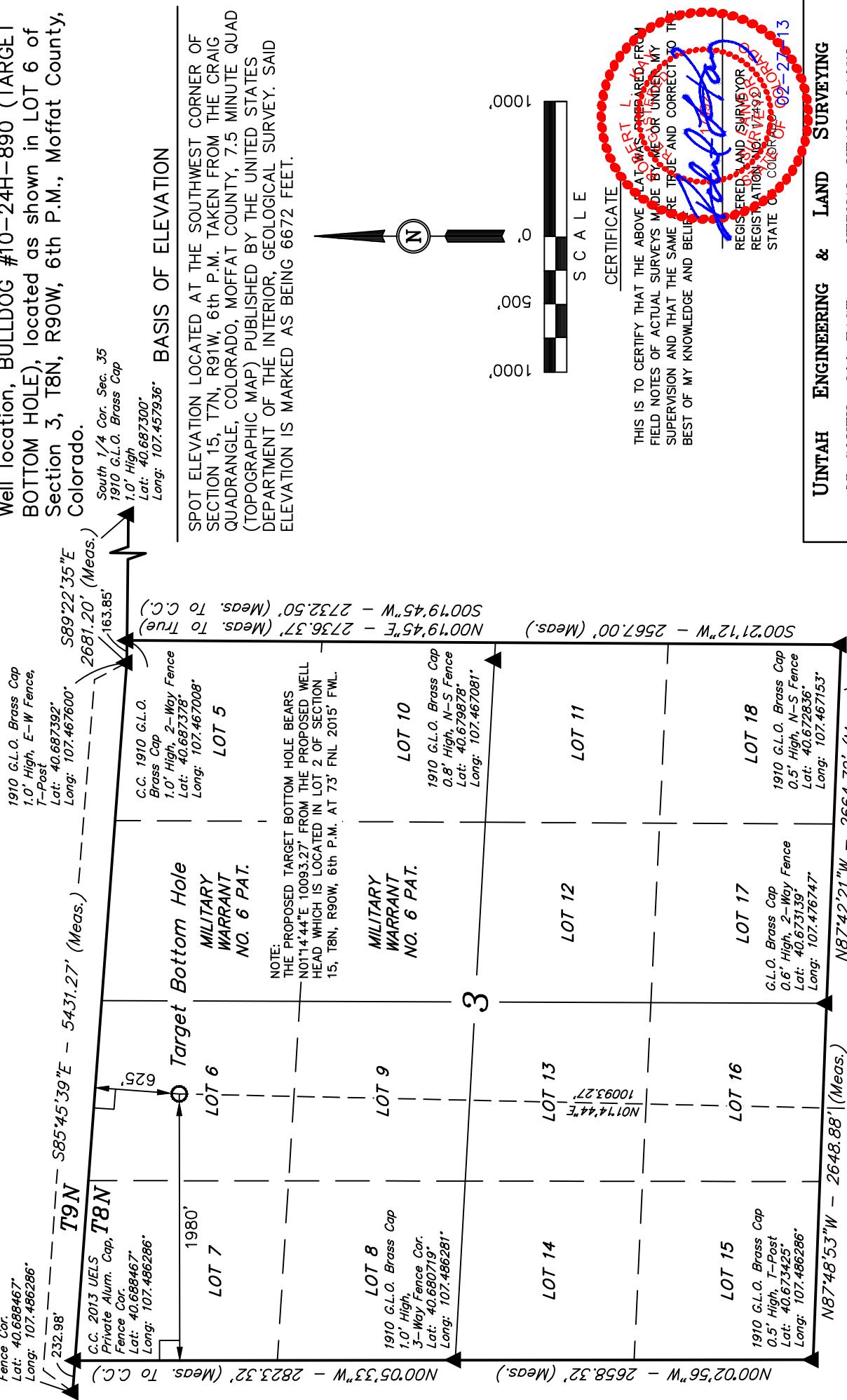
▲ = SECTION CORNERS LOCATED.

T<sup>8</sup>N, R90W, 6th P.M.

**AXIA ENERGY**

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Well location, BULLDOG #10-24H-890 (TARGET BOTTOM HOLE), located as shown in LOT 6 of Section 3, T8N, R90W, 6th P.M., Moffat County, Colorado.



## LEGEND:

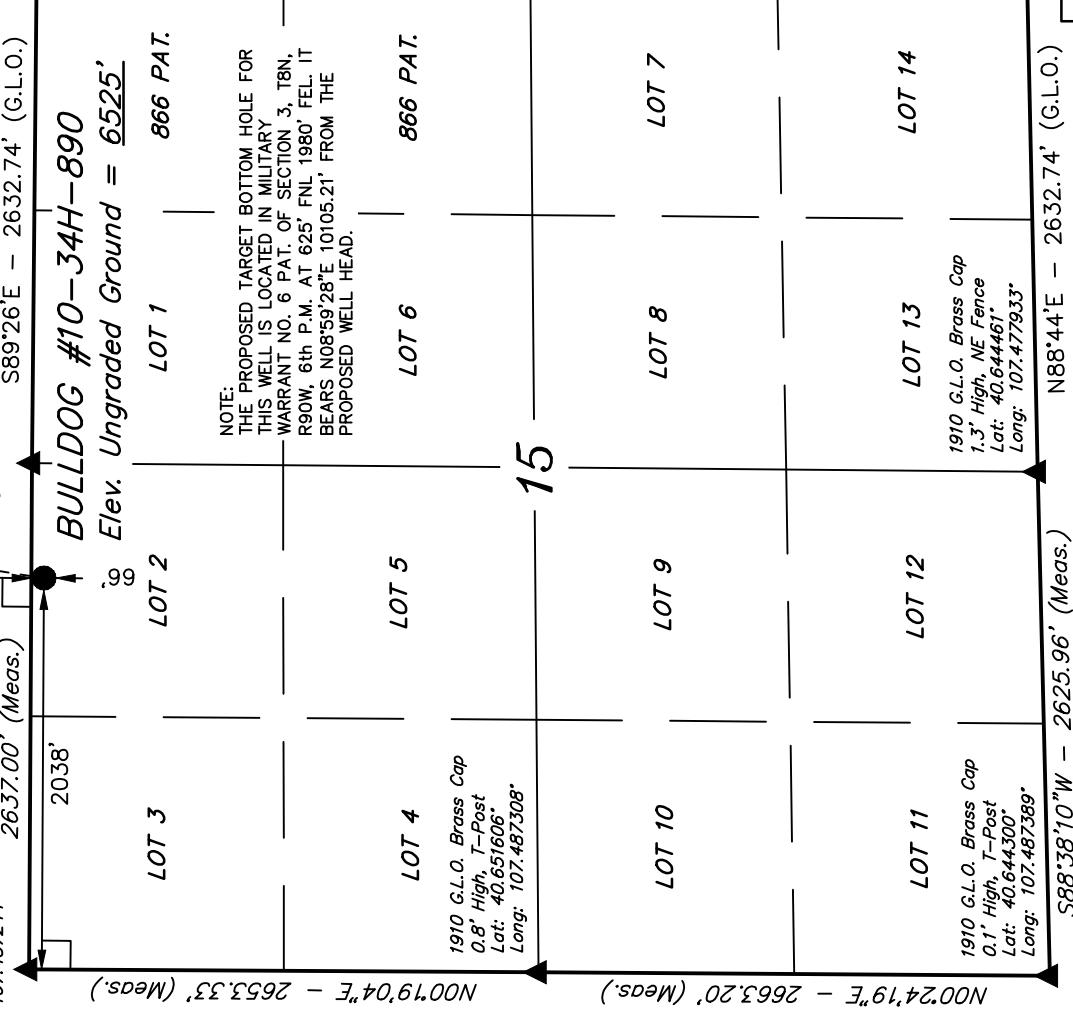
- | (430) 88-1017                              |                          |                             |                            |
|--|--------------------------|-----------------------------|----------------------------|
| NAD 83 (TARGET BOTTOM HOLE)                |                          | NAD 83 (TARGET BOTTOM HOLE) |                            |
| L  | = 90° SYMBOL             | SCALE<br>1" = 1000'         | DATE SURVEYED:<br>02-05-13 |
| ●  | = PROPOSED WELL HEAD.    | PARTY<br>G.M. M.M. T.B.     | REFERENCES<br>G.L.O. PLAT  |
| ▲  | SECTION CORNERS LOCATED. | WEATHER<br>COLD             | FILE                       |
| <u>BASIS OF BEARINGS</u>                   |                          |                             | Axia Energy                |
| BASIS OF BEARINGS IS A G.P.S. OBSERVATION. |                          |                             |                            |

# Target Bottom Hole T8N, R90W, 6th P.M.

G.L.O. Brass Cap  
1.2' High, 2-Way Fence  
Lat: 40.658836'  
Long: 107.487244'

1910 G.L.O. Brass Cap  
0.5' High  
Lat: 40.658836'  
Long: 107.477744'

N08°59'28"E  
10105°21' N  
28"E



## AXIA ENERGY

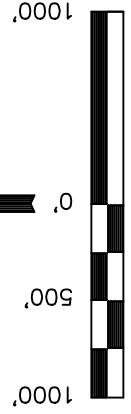
Well location, BULLDOG #10-34H-890 (SURFACE LOCATION), located as shown in LOT 2 of Section 15, T8N, R90W, 6th P.M., Moffat County, Colorado.

### BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R91W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

### BASIS OF ELEVATION

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



### SCALE

### CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE LATITUDE AND LONGITUDE ARE CORRECT FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.  
*[Handwritten signature]*

REGISTERED AND SURVEYOR  
REGISTRATION NO. 92013  
STATE OF COLORADO  
03-01-13

REVISED: 03-01-13

### UINTAH ENGINEERING & LAND SURVEYING

(435) 789-1017

85 SOUTH 200 EAST - VERNAL, UTAH 84078

(435) 789-1017

REFERENCES  
G.L.O. PLAT

FILE  
AXA ENERGY

### LEGEND:

— 90° SYMBOL

● = PROPOSED WELL HEAD.

▲ = SECTION CORNERS LOCATED.



# T8N, R90W, 6th P.M.

**Target Bottom Hole** Q  
 G.L.O. Brass Cap  
 1.2' High, 2-Way Fence  
 Lat: 40.658866°  
 Long: 107.48244°

2637.00' (Meas.)

2058'

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.658639°

Long: 107.477744°

S89°26'E - 2632.74' (G.L.O.)

BULLDOG #10-24V-890

Elev. Ungraded Ground = 6526'

LOT 1

866 PAT.

NOTE:

THE PROPOSED TARGET BOTTOM HOLE FOR THIS WELL IS LOCATED IN LOT 14 OF SECTION 10, T8N, R90W, 6th P.M. AT 660' FSL 1980' FWL. IT BEARS NO325'33"W 721.14' FROM THE PROPOSED WELL HEAD.

LOT 4

1910 G.L.O. Brass Cap  
 0.8' High, T-Post

Lat: 40.651006°

Long: 107.48308°

LOT 5

1910 G.L.O. Brass Cap  
 0.1' High, T-Post

Lat: 40.644300°

Long: 107.487389°

LOT 6

1910 G.L.O. Brass Cap  
 1.3' High, NE Fence

Lat: 40.644461°

Long: 107.477933°

LOT 7

866 PAT.

LOT 8

1910 G.L.O. Brass Cap  
 1.3' High, 2-Way Fence

Lat: 40.644461°

Long: 107.477933°

LOT 9

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 10

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 11

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 12

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 13

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 14

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 15

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 16

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 17

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 18

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 19

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 20

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 21

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 22

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 23

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 24

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 25

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 26

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 27

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 28

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 29

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 30

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 31

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 32

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 33

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 34

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 35

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 36

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 37

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 38

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 39

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 40

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 41

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 42

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 43

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 44

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 45

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 46

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 47

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 48

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 49

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 50

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 51

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 52

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 53

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 54

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 55

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 56

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 57

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 58

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 59

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 60

1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

Long: 107.477933°

LOT 61

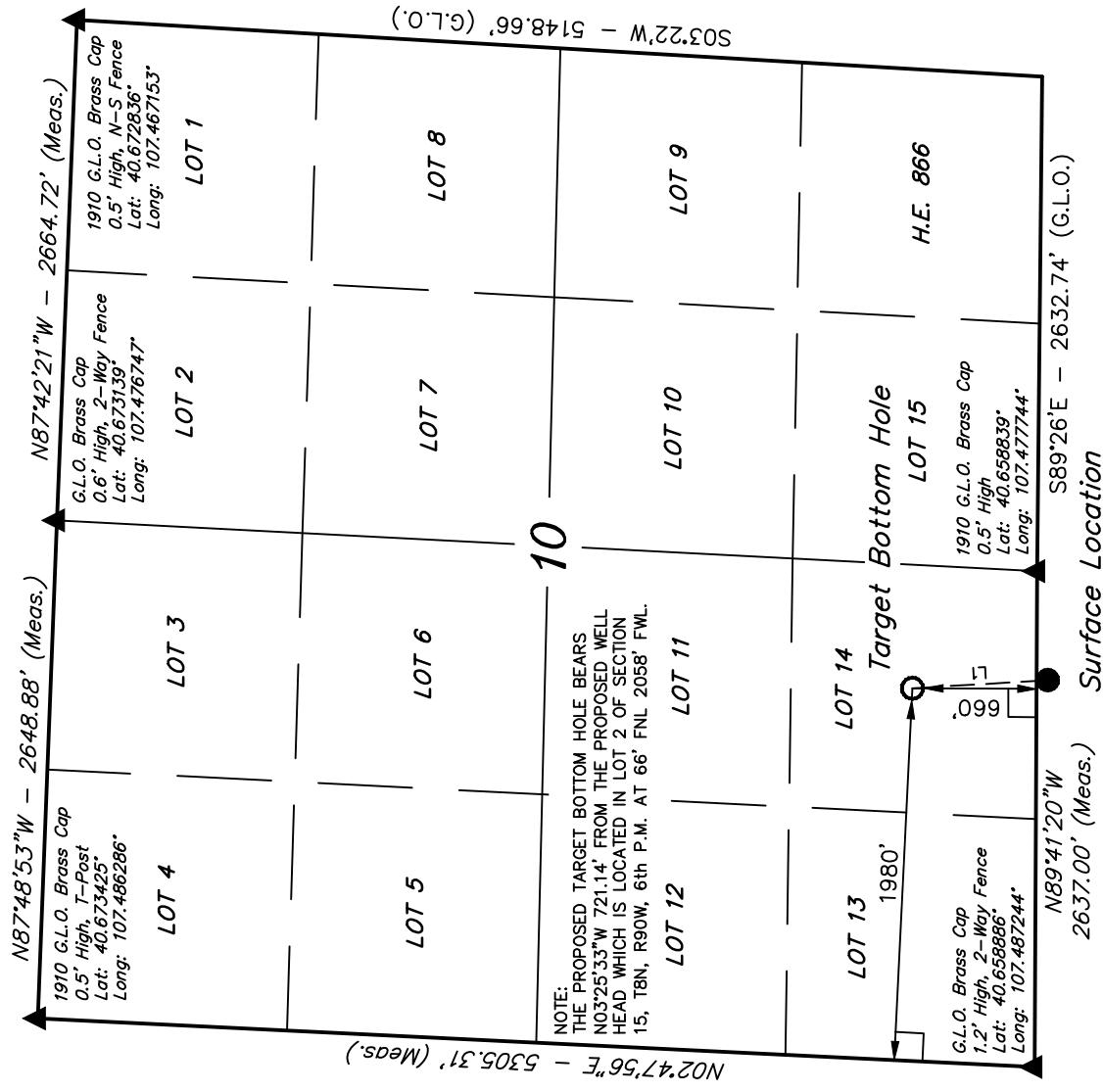
1910 G.L.O. Brass Cap  
 0.5' High

Lat: 40.644461°

# T8N, R90W, 6th P.M.

## AXIA ENERGY

Well location, BULLDOG #10-24V-890 (TARGET BOTTOM HOLE), located as shown in LOT 14 of Section 10, T8N, R90W, 6th P.M., Moffat County, Colorado.

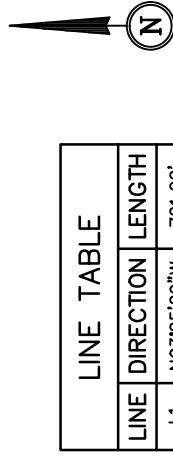


## BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE SOUTHWEST CORNER OF SECTION 15, T7N, R91W, 6th P.M. TAKEN FROM THE CRAIG QUADRANGLE, COLORADO, MOFFAT COUNTY, 7.5 MINUTE QUAD (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6672 FEET.

## BASIS OF BEARINGS

BASIS OF BEARINGS IS A G.P.S. OBSERVATION.



## LINE TABLE

LINE	DIRECTION	LENGTH
L1	N03°25'29"W	721.22'

## S C A L E

CERTIFICATE  
ERT L. RED FRED  
REGISFERED AND SURVEYOR  
REGISTRATION SURVEYOR  
STATE CORNER CO. 04-01-13

THIS IS TO CERTIFY THAT THE ABOVE LATITUDE AND LONGITUDE ARE CORRECTED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

*[Handwritten signature]*

UINTAH ENGINEERING & LAND SURVEYING  
85 SOUTH 200 EAST - VERNAL, UTAH 84078  
(435) 789-1017

NAD 83 (TARGET BOTTOM HOLE)	SCALE	DATE DRAWN:
LATITUDE = 40°39'35.38" (40.660661)	1" = 1000'	03-28-13 04-01-13
LONGITUDE = 107°28'47.94" (107.479983)	PARTY	REFERENCES
NAD 27 (TARGET BOTTOM HOLE)		G.L.O. PLAT
LATITUDE = 40°39'35.49" (40.660692)		FILE
LONGITUDE = 107°28'45.71" (107.479364)		AXA ENERGY
STATE PLANE NAD 83		
N: 1489653.85 E: 2450719.89	WEATHER	
STATE PLANE NAD 27	COLD	
N: 489652.48 E: 1450877.31		

## LEGEND:

- = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

**AXIA ENERGY**  
**BULLDOG #10-24V-890, #10-34H-890,**  
**#10-24H-890, #15-21H-890 & #15-11H-890**  
**SECTION 15, T8N, R90W, 6<sup>th</sup> P.M.**

PROCEED IN A NORTHERLY, THEN NORTHEASTERLY DIRECTION FROM CRAIG, COLORADO ALONG HIGHWAY 789 APPROXIMATELY 5.5 MILES TO THE JUNCTION OF THIS ROAD AND COUNTY ROAD 22 TO THE NORTHWEST; TURN LEFT AND PROCEED IN A NORTHWESTERLY, THEN WESTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 1.5 MILES TO THE JUNCTION OF THIS ROAD AND AN EXISTING ROAD TO THE NORTH; TURN RIGHT AND PROCEED IN A NORTHERLY DIRECTION APPROXIMATELY 5.7 MILES TO THE BEGINNING OF THE PROPOSED ACCESS ROAD TO THE SOUTHEAST; FOLLOW ROAD FLAGS IN A SOUTHEASTERLY, THEN NORTHEASTERLY, THEN SOUTHEASTERLY, THEN NORTHEASTERLY, THEN NORTHWESTERLY DIRECTION APPROXIMATELY 14,723' TO THE PROPOSED LOCATION.

TOTAL DISTANCE FROM CRAIG, COLORADO TO THE PROPOSED WELL LOCATION IS APPROXIMATELY 15.5 MILES.