

STATE OF UTAH  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF OIL, GAS AND MINING

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>		<b>1. WELL NAME and NUMBER</b> STELLA 3-36C6 SWD
<b>2. TYPE OF WORK</b> DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>		<b>3. FIELD OR WILDCAT</b> ALTAMONT
<b>4. TYPE OF WELL</b> Water Disposal Well Coalbed Methane Well: NO		<b>5. UNIT or COMMUNITIZATION AGREEMENT NAME</b>
<b>6. NAME OF OPERATOR</b> INTEGRATED WATER MANAGEMENT LLC		<b>7. OPERATOR PHONE</b> 435 722-3555
<b>8. ADDRESS OF OPERATOR</b> PO Box 816, Roosevelt, UT, 84066		<b>9. OPERATOR E-MAIL</b> rballou@stratamet.com
<b>10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE)</b> FEE	<b>11. MINERAL OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>	<b>12. SURFACE OWNERSHIP</b> FEDERAL <input type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input checked="" type="checkbox"/>
<b>13. NAME OF SURFACE OWNER (if box 12 = 'fee')</b> Integrated Water Management		<b>14. SURFACE OWNER PHONE (if box 12 = 'fee')</b> 435-454-4646
<b>15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')</b> PO Box 430, Altamont, UT 84001		<b>16. SURFACE OWNER E-MAIL (if box 12 = 'fee')</b>
<b>17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')</b>	<b>18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS</b> YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>	<b>19. SLANT</b> VERTICAL <input checked="" type="checkbox"/> DIRECTIONAL <input type="checkbox"/> HORIZONTAL <input type="checkbox"/>

20. LOCATION OF WELL	FOOTAGES	QTR-QTR	SECTION	TOWNSHIP	RANGE	MERIDIAN
LOCATION AT SURFACE	806 FNL 713 FWL	NWNW	36	3.0 S	6.0 W	U
Top of Uppermost Producing Zone	806 FNL 713 FWL	NWNW	36	3.0 S	6.0 W	U
At Total Depth	806 FNL 713 FWL	NWNW	36	3.0 S	6.0 W	U

<b>21. COUNTY</b> DUCHEсне	<b>22. DISTANCE TO NEAREST LEASE LINE (Feet)</b> 713	<b>23. NUMBER OF ACRES IN DRILLING UNIT</b> 300
<b>27. ELEVATION - GROUND LEVEL</b> 5061	<b>25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completion)</b> 1300	<b>26. PROPOSED DEPTH</b> MD: 6500 TVD: 6500
	<b>28. BOND NUMBER</b> RLB0015241	<b>29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE</b> Fresh- Duchesne City Water Tap

Hole, Casing, and Cement Information											
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight	
COND	20	13.375	0 - 50	48.0	H-40 ST&C	8.9	Class G	110	1.15	15.8	
SURF	12.25	9.625	0 - 3000	36.0	K-55 LT&C	8.9	Type V	840	3.82	11.0	
							Class G	370	1.15	15.8	
I1	8.75	7	0 - 6500	26.0	N-80 LT&C	11.0	Class G	230	1.7	13.1	
							Type V	100	3.82	11.0	

**ATTACHMENTS**

VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES

<input checked="" type="checkbox"/> WELL PLAT OR MAP PREPARED BY LICENSED SURVEYOR OR ENGINEER	<input checked="" type="checkbox"/> COMPLETE DRILLING PLAN
<input type="checkbox"/> AFFIDAVIT OF STATUS OF SURFACE OWNER AGREEMENT (IF FEE SURFACE)	<input type="checkbox"/> FORM 5. IF OPERATOR IS OTHER THAN THE LEASE OWNER
<input type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)	<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP

<b>NAME</b> Brad Wells	<b>TITLE</b> Sales	<b>PHONE</b> 435 724-2063
<b>SIGNATURE</b>	<b>DATE</b> 03/20/2013	<b>EMAIL</b> wells.lb@gmail.com
<b>API NUMBER ASSIGNED</b> 43013523330000		<b>APPROVAL</b>

Received: August 16, 2013

# Integrated Water Management

## DRILLING PLAN

Stella 3-36C6 SWD

806' FNL 713' FWL NW1/4NW1/4 USB&M

Section 36, T3S, R6W, USB&M

Duchesne County, Utah

Lease No: Integrated Water Management (Fee)

### 1 & 2 ESTIMATED TOPS ANTICIPATED OIL, GAS AND WATER ZONES FORMATION DEPTH ZONE TYPE MAX. PRESSURE

<u>FORMATION</u>	<u>DEPTH</u>	<u>ZONE TYPE</u>	<u>MAX. PRESSURE</u>
Duchesne River	Surface	Water	1,000.0 psi
Uinta Fm.	2,095'	Water & Gas	1,000.0 psi
Green River Formation	3,201'	Oil, Gas & Water	2,200.0 psi
Douglas Creek	6,126'	Oil, Gas & Water	2,653.0 psi

Max Pressure is figured as Hydrostatic .4331 pounds per square foot X Depth

### 3. PRESSURE CONTROL EQUIPMENT

A 5K X 11" Rotating Head and BOP Stack and 5K Fill and Kill lines and Choke Manifold Blind & Pipe Rams, Mud Cross from 1,500' to 6,500'.

The surface casing will be equipped with a flanged casing head of 5K psi working pressure. An 11.0" 5K BOP and 5K Annular preventer will be nipped up on the surface casing and tested to 250 psi low pressure test and 5K psi high pressure test prior to drilling out. The surface casing will be tested to 1,500 psi. The choke manifold equipment, upper Kelly cock and floor safety valves will be tested to 5K psi. The annular preventer will be tested to 250 psi low test and 2,500 psi high test or 50% of the rated working pressure.

The BOPE will be tested after running intermediate casing, after any repairs to the equipment and as required by OSHA regulations while drilling.

The pipe and blind rams will be activated each time a trip is made, and the annular preventer will be activated weekly.

Weekly BOP tests will be held with each crew.

Other equipment will include:

- Mud logger with gas monitor, if needed.
- Choke Manifold with one manual and one hydraulic operated choke
- Full opening floor valve with drill pipe thread
- Upper and lower Kelly Cock
- Shaker, desander, desilter, and mud cleaner

See the attached diagrams:

#### **4. CASING AND CEMENTING PROGRAM:**

##### **Casing:**

**Conductor:** Hole Size= 20" Casing Size= 13 3/8"  
50' +/- 13 3/8 H40 48.00 lb

**Surface:** Hole Size= 12 1/4" Casing Size= 9 5/8"  
3,000' +/- 9 5/8" 36# K55 LTC New API ERW Casing.

Notes: API setting depth for collapse is 4,664' +/- the safety factor

Tension with Long Couplings is 48,900 lbs +/- (SF)

Standard Mill Test: 2,000 psi.

80% min Yield Test: 2,816 psi.

Drift Diameter: 8.765

Coupling OD of 9 5/8" is 10.625"

**Intermediate:** Hole Size= 8 3/4" Casing Size= 7"  
6,500' 7" 26# N80 LTC New Seamless API Casing.

Notes: API Setting depth for Collapse is 12,491' + 1.8 (SF)

Tension with Long Couplings is 51,900 lbs +/- (SF)

Standard Mill Test: 3,984 psi.

Ultimate Yield: 6,790 psi

Drift Diameter: 6.151

Coupling OD: of 7" Flush Joint is 7.56"

Description: CBL Casing Connection is a premium connection based on API BTC standard with the addition of a torque shoulder and metal to metal seal. The result is a cost effective connection ideal for use in horizontal or slant wells bores typically used in Shale formations. The torque shoulder provides consistent make-ups and eliminates down hole over-rotation. The metal to metal seal is designed to provide the primary seal while minimizing galling. CBL is interchangeable with BTC accessories.

##### **Cement Program:**

Conductor will be 13 3/8 H40 48.00 lb casing set to 50' cemented to surface with sufficient redimix to bring the cement to surface.

##### **1. 9 5/8 Surface Casing**

TD 3000' ft

Hole Size 12 1/4 in

Casing Size 9 5/8 in

Tail Cement 2500 ft to 3000

Tail Cement excess 50 %

Lead Cement 2500 ft to surface

Lead Cement excess 50 %

**Premium Hifill cmt 840 sks 11.0 #/gal 3.82 cuft/sk 23 gal/sk**

Premium V cmt 100 % (BWOC)

Gel 6 % (BWOC)

Gilsonite 10 #/sk  
Gr3 3 #/sk  
Salt 3 % (BWOC)  
Flocele ¼ #/sk

**Premium G Cmt 370 sks 15.8 #/gal 1.15 cuft/sk 5.0 gal/sk**

Premium G Cmt 100 % (BWOC)  
Calcium Chloride 2 % (BWOC)  
Flocele ¼ #/sk

**Topout: Premium G Cmt 220 sks 15.8 #/gal 1.15 cuft/sk 5.0 gal/sk**

Premium G Cmt 100 % (BWOC)  
Calcium Chloride 2 % (BWOC)  
Flocele ¼ #/sk

## **2. 7 in Casing**

TD 6,500 ft  
Hole Size 8 ¾ in  
Casing Size 7 in  
1st stage  
Tail Cmt Coverage 6500ft to 5000 ft  
Tail Cmt Excess 15 %  
2nd stage  
Lead Cmt Coverage 5000 ft to 500ft  
Lead Cmt Excess 15 %  
Tail cmt across stage tool 50 sks

**1 s t Stage: Cmt Prem. Lite 239 sks 13.1 #/gal 1.70 cuft/sk 7.7 gal/sk**

Premium G Cmt 65 % (BWOC)  
Poz 35 % (BWOP)  
Gel 6 %  
Salt 10 % (BWOW)  
Gilsonite 10 #/sk  
CFL 115 .2 %  
Flocele ¼ #/sk

**2 nd Stage: Premium Hifill cmt 100 sks 11.0 #/gal 3.82 cuft/sk 23 gal/sk**

Premium V cmt 100 % (BWOC)  
Gel 6 % (BWOC)  
Gilsonite 10 #/sk  
Gr3 3 #/sk  
Salt 3 % (BWOC)  
Flocele ¼ #/sk

**Cmt Prem. Lite 40 sks 13.1 #/gal 1.70 cuft/sk 7.7 gal/sk**

Premium G Cmt 65 % (BWOC)  
Poz 35 % (BWOP)  
Gel 6 %  
Salt 10 % (BWOW)

Gilsonite 10 #/sk  
CFL 115 .2 %  
Flocele ¼ # /sk

Cement volumes will be calculated from the open hole logs whenever possible. All casing strings will be cemented to surface or at least 100' up into the previous casing string.

## **5. MUD PROGRAM:**

### **INTERVAL MUD TYPE WEIGHT**

Surface Water & gel 8.5 to 8.9 PPG

Intermediate Water, Gel & Weight as needed 8.9 to 11 PPG

Anticipated mud weights and lost circulation zones are based on offsetting wells and drilling data. Mud weights may be higher than projected, depending on actual zones encountered during drilling.

Visual mud monitoring equipment will be utilized along with a pit volume monitor and alarm.

Sufficient mud inventory will be maintained on location during drilling operations to handle any adverse conditions that may arise.

## **6. LOGS:**

Open Hole logs from Surface to base of intermediate and from base of the intermediate to TD @ 6,500'

Gamma Ray, Density Neutron, Resistivity.

Cased hole logs from Surface to TD@ 6,500'

High Tech Bond Log

## **7. VARIANCE REQUESTS:**

None

## **8. ABNORMAL CONDITIONS:**

A corrosive water zone in the well may be encountered at a depth of 1,000' to 2,500' that compromises the integrity of the pipe after 15-20 years. Extra precaution will be taken to set casing and cement across this zone.

Integrated Water Management (IWM) is proposing to set 3,000 ft of surface casing in this wellbore to mitigate the potential for large volume lost circulation while drilling the production hole interval. This well is less than 1 mile from the Bill Barrett Corp. (BBC) 5-25-36 BTR well, in which BBC ran 2,990' of surface casing. There were no encounters with lost circulation, water flows, or fresh or saline/trona during drilling of that surface hole and there was no evidence of any hydrocarbons encountered.

**9. OTHER:**

No chemicals subject to reporting under SARA III in an amount to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually with the drilling of this well, Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold quantities, will be used, produced, stored, transported or disposed of in association with the drilling of this well.

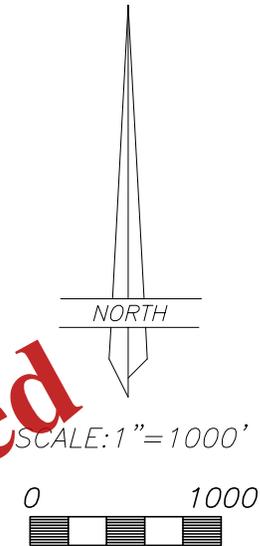
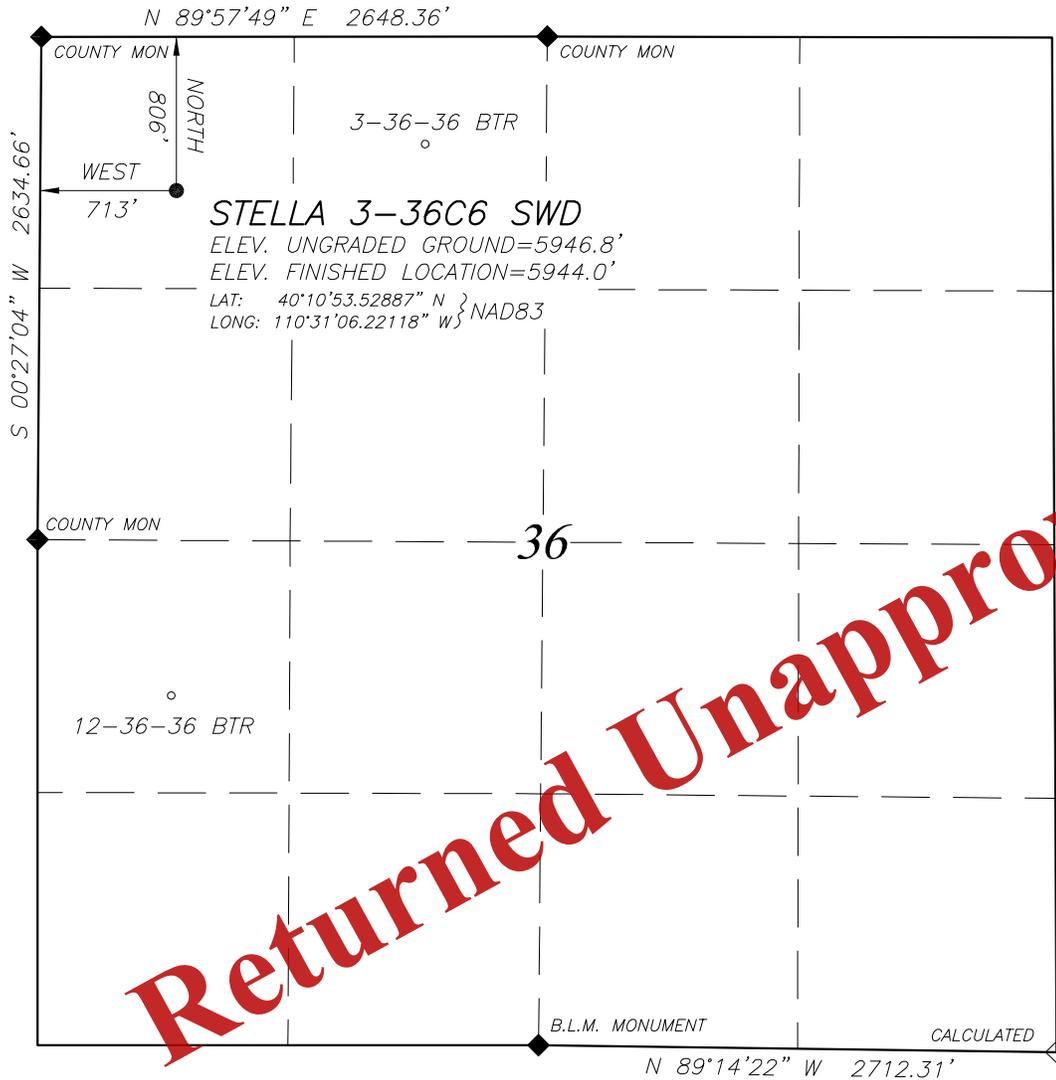
**Returned Unapproved**

# INTEGRATED WATER MANAGEMENT

## WELL LOCATION

### STELLA 3-36C6 SWD

LOCATED IN THE NW¼ OF THE NW¼,  
SECTION 36, T3S, R6W, U.S.B.&M.  
DUCHESNE COUNTY, UTAH



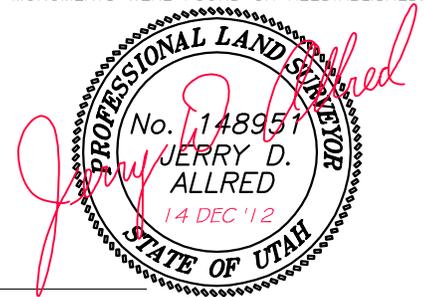
Returned Unapproved

#### LEGEND AND NOTES

- ◆ CORNER MONUMENTS FOUND AND USED BY THIS SURVEY
- THE GENERAL LAND OFFICE (G.L.O.) PLAT WAS USED FOR REFERENCE AND CALCULATIONS AS WAS THE U.S.G.S. MAP
- THIS SURVEY WAS PERFORMED USING GLOBAL POSITIONING SYSTEM PROCEDURES AND EQUIPMENT
- THE BASIS OF BEARINGS IS GEODETIC NORTH DERIVED FROM G.P.S. OBSERVATIONS AT THE CONTROL POINT LOCATED AT LAT 40°10'40.59076"N AND LONG 110°27'11.78262"W USING THE UTAH STATE G.P.S. VIRTUAL REFERENCE STATION CONTROL NETWORK MAINTAINED AND OPERATED BY THE AUTOMATED GEOGRAPHIC REFERENCE CENTER
- BASIS OF ELEVATIONS: NAVD 88 DATUM USING THE UTAH REFERENCE NETWORK CONTROL SYSTEM

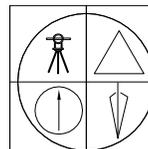
#### SURVEYOR'S CERTIFICATE

I HEREBY CERTIFY THAT THIS PLAT WAS PREPARED FROM THE FIELD NOTES AND ELECTRONIC DATA COLLECTOR FILES OF AN ACTUAL SURVEY PERFORMED BY ME, OR UNDER MY PERSONAL SUPERVISION, DURING WHICH THE SHOWN MONUMENTS WERE FOUND OR REESTABLISHED.



JERRY D. ALLRED, REGISTERED LAND SURVEYOR,  
CERTIFICATE NO. 148951 (UTAH)

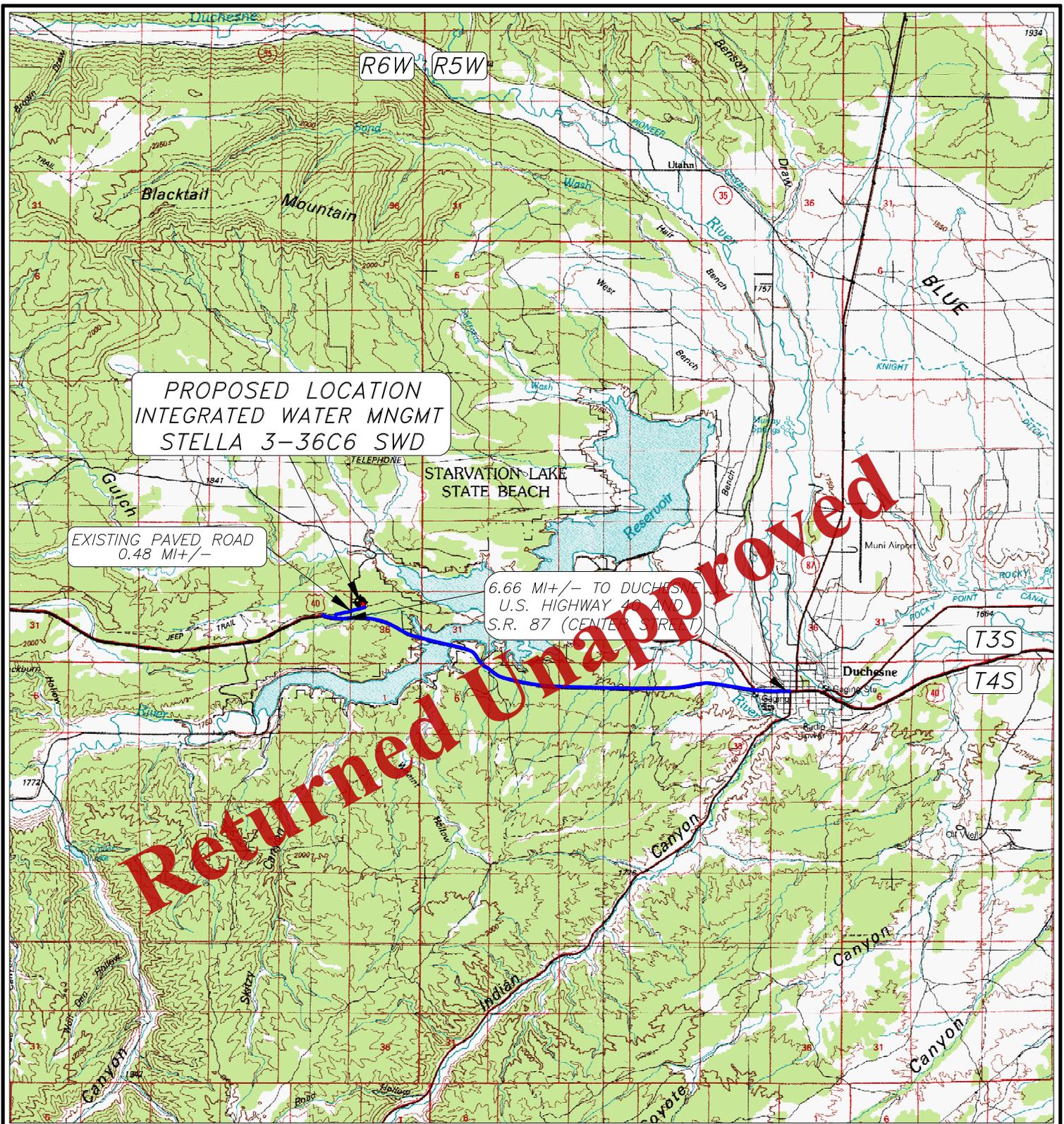
REV 14 DEC 2012  
10 DEC 2012 12-100-012



**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352

**Received: March 20, 2013**



PROPOSED LOCATION  
INTEGRATED WATER MNGMT  
STELLA 3-36C6 SWD

EXISTING PAVED ROAD  
0.48 MI +/-

6.66 MI +/- TO DUCHESNE  
U.S. HIGHWAY 89 AND  
S.R. 87 (CENTRAL STREET)

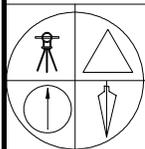
**LEGEND:**

◆ PROPOSED WELL LOCATION

12-100-062

**JERRY D. ALLRED & ASSOCIATES**  
SURVEYING CONSULTANTS

1235 NORTH 700 EAST--P.O. BOX 975  
DUCHESNE, UTAH 84021  
(435) 738-5352



**INTEGRATED WATER MANAGEMENT**

STELLA 3-36C6 SWD

SECTION 36, T3S, R6W, U.S.B.&M.

806' FNL 713' FWL

**TOPOGRAPHIC MAP "A"**

SCALE; 1"=10,000'

14 DEC 2012

**Received: March 20, 2013**



February 22, 2013

Division of Oil, Gas, and Mining  
Utah Department of Natural Resources  
Attn: Mr. Brad Hill  
Oil and Gas Permitting Manager  
PO Box 145801  
Salt Lake City, UT 84114-5801

*Re: Integrated Water Management APD for the Proposed Stella 3-36C6 Salt Water Disposal Well Located in Section 36 T3S, R6W, U.S.B. &M.*

Dear Mr. Hill,

I am writing to you in regards to Integrated Water Management, LLC (IWM) plans and Application to drill the above-referenced Stella 3-36C6 SWD well within Bill Barrett Corporation's ("BBC") Ute Tribal Mineral Leasehold within Section 36. IWM has provided BBC with a draft of their APD for our review. At this time please consider this letter as our approval of this project to the Division, subject that IWM's plans do not change under the provided APD and will provide BBC full and free access to all the Stella 3-36C6 SWD well data. BBC does not oppose IWM's efforts as they currently exist, although it reserves the right to oppose or object should IWM materially modify the proposed APD.

Should you have any questions or concerns, please contact me at 303-312-8544.

Sincerely,  
Bill Barrett Corporation

A handwritten signature in blue ink that reads 'David Watts'.

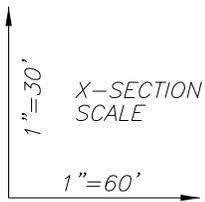
David Watts  
Landman  
dwatts@billbarrettcorp.com

cc: Integrated Water Management, LLC

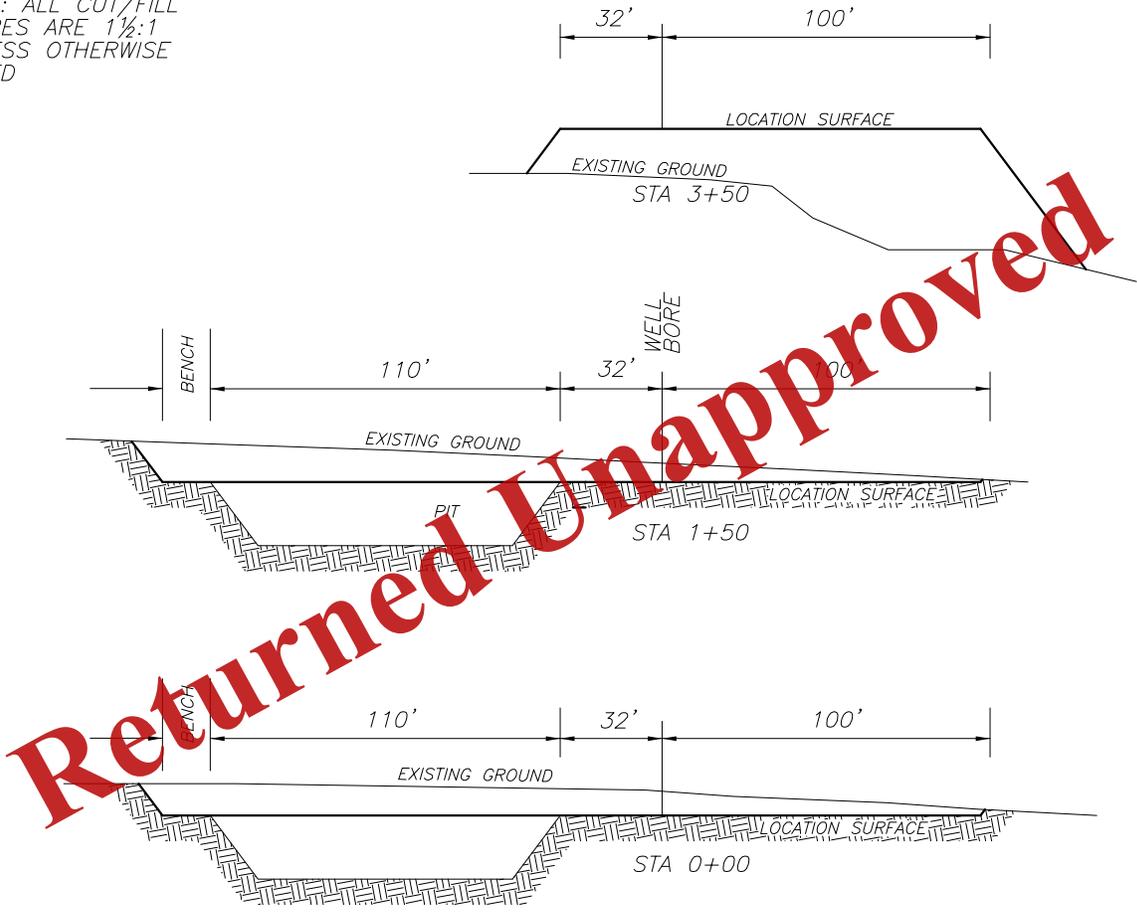
# INTEGRATED WATER MANAGEMENT

LOCATION LAYOUT FOR  
 STELLA 3-36C6 SWD  
 SECTION 36, T3S, R6W, U.S.B.&M.  
 806' FNL, 713' FWL

FIGURE #2



NOTE: ALL CUT/FILL  
 SLOPES ARE 1½:1  
 UNLESS OTHERWISE  
 NOTED



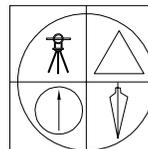
APPROXIMATE YARDAGES

- TOTAL CUT (INCLUDING PIT) = 11,679 CU. YDS.
- PIT CUT = 4572 CU. YDS.
- TOPSOIL STRIPPING: (6") = 856 CU. YDS.
- REMAINING LOCATION CUT = 6251 CU. YDS.
- TOTAL FILL = 5846 CU. YDS.



REV 14 DEC 2012  
 10 DEC 2012

12-100-062



JERRY D. ALLRED & ASSOCIATES  
 SURVEYING CONSULTANTS

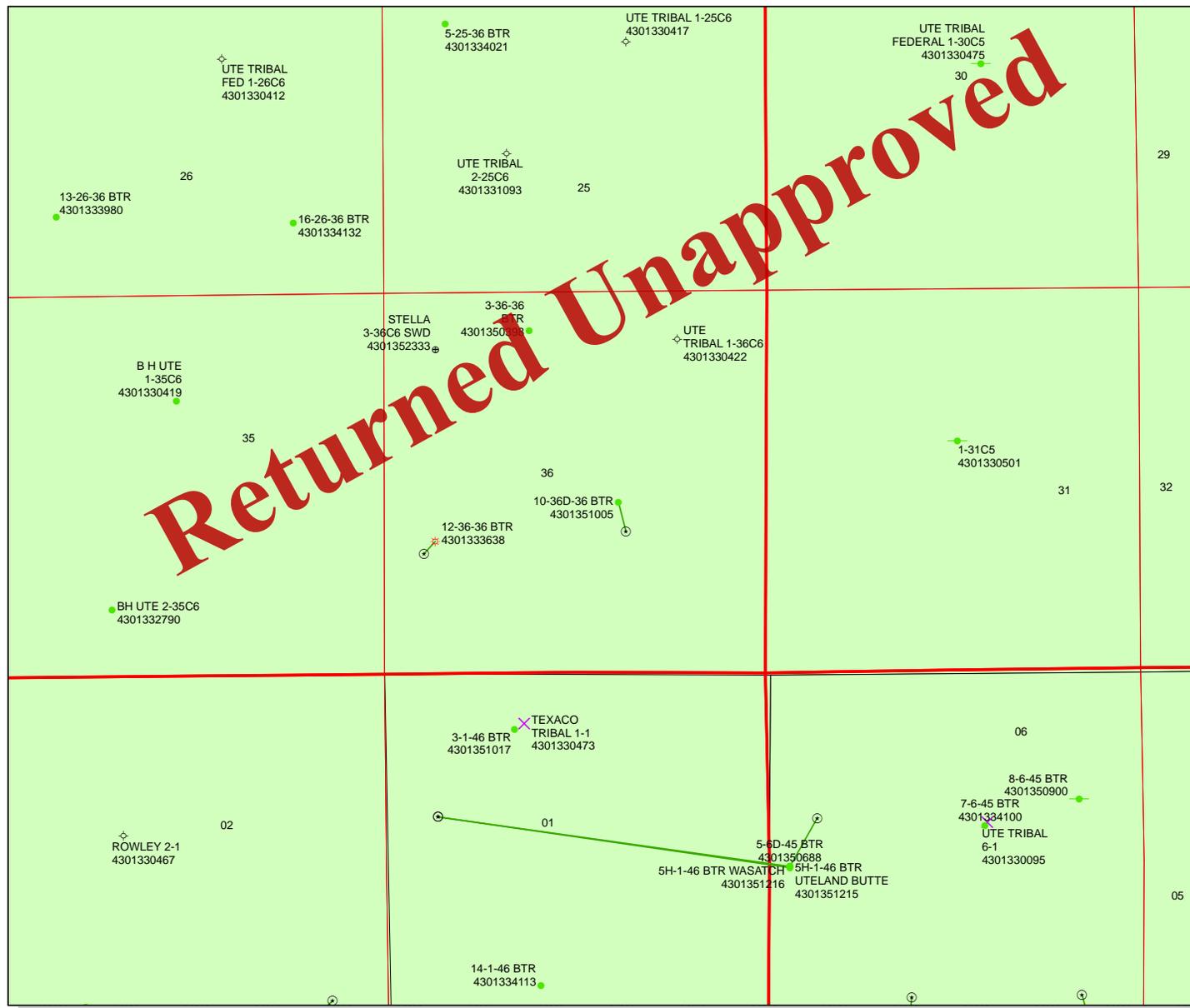
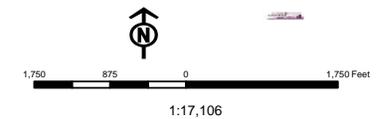
1235 NORTH 700 EAST--P.O. BOX 975  
 DUCHESNE, UTAH 84021  
 (435) 738-5352

Received: March 20, 2013

**API Number: 4301352333**  
**Well Name: STELLA 3-36C6 SWD**  
**Township T03.0S Range R06.0W Section 36**  
**Meridian: UBM**  
 Operator: INTEGRATED WATER MANAGEMENT LLC

Map Prepared:  
 Map Produced by Diana Mason

- Units STATUS
- ACTIVE
  - EXPLORATORY
  - GAS STORAGE
  - NF PP OIL
  - NF SECONDARY
  - PI OIL
  - PP GAS
  - PP GEOTHERM
  - PP OIL
  - SECONDARY
  - TERMINATED





GARY R. HERBERT  
*Governor*

SPENCER J. COX  
*Lieutenant Governor*

# State of Utah

## DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER  
*Executive Director*

### Division of Oil, Gas and Mining

JOHN R. BAZA  
*Division Director*

March 24, 2015

INTEGRATED WATER  
MANAGEMENT LLC  
PO Box 430  
Altamont, UT 84001

Re: Application for Permit to Drill - DUCHESNE County, Utah

Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the STELLA 3-36C6 SWD well, API 43013523330000 that was submitted March 20, 2013 is being returned unapproved. If you plan on drilling this well in the future, you must first submit a new application.

Should you have any questions regarding this matter, please call me at (801) 538-5312.

Sincerely,

Diana Mason  
Environmental Scientist

Enclosure

cc: Bureau of Land Management, Vernal, Utah



