

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

FORM 3

AMENDED REPORT

<b>APPLICATION FOR PERMIT TO DRILL</b>						1. WELL NAME and NUMBER Big Indian 24-31B-30-25				
2. TYPE OF WORK DRILL NEW WELL <input checked="" type="checkbox"/> REENTER P&A WELL <input type="checkbox"/> DEEPEN WELL <input type="checkbox"/>						3. FIELD OR WILDCAT UNDESIGNATED				
4. TYPE OF WELL Gas Well Coalbed Methane Well: NO						5. UNIT or COMMUNITIZATION AGREEMENT NAME				
6. NAME OF OPERATOR CCI PARADOX UPSTREAM, LLC						7. OPERATOR PHONE 303 728-2222				
8. ADDRESS OF OPERATOR 600 17th Street, Suite 1900S, Denver, CO, 80202						9. OPERATOR E-MAIL edward.seeman@cci.com				
10. MINERAL LEASE NUMBER (FEDERAL, INDIAN, OR STATE) UTU-82597			11. MINERAL OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>			12. SURFACE OWNERSHIP FEDERAL <input checked="" type="checkbox"/> INDIAN <input type="checkbox"/> STATE <input type="checkbox"/> FEE <input type="checkbox"/>				
13. NAME OF SURFACE OWNER (if box 12 = 'fee')						14. SURFACE OWNER PHONE (if box 12 = 'fee')				
15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')						16. SURFACE OWNER E-MAIL (if box 12 = 'fee')				
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')			18. INTEND TO COMMINGLE PRODUCTION FROM MULTIPLE FORMATIONS YES <input type="checkbox"/> (Submit Commingling Application) NO <input checked="" type="checkbox"/>			19. SLANT VERTICAL <input type="checkbox"/> DIRECTIONAL <input checked="" type="checkbox"/> HORIZONTAL <input type="checkbox"/>				
20. LOCATION OF WELL		FOOTAGES		QTR-QTR	SECTION	TOWNSHIP		RANGE	MERIDIAN	
LOCATION AT SURFACE		1778 FSL 1086 FWL		NWSW	24	30.0 S		25.0 E	S	
Top of Uppermost Producing Zone		1830 FSL 1299 FWL		NWSW	24	30.0 S		25.0 E	S	
At Total Depth		1830 FSL 1299 FWL		NWSW	24	30.0 S		25.0 E	S	
21. COUNTY SAN JUAN			22. DISTANCE TO NEAREST LEASE LINE (Feet) 1086			23. NUMBER OF ACRES IN DRILLING UNIT 40				
27. ELEVATION - GROUND LEVEL 6311			25. DISTANCE TO NEAREST WELL IN SAME POOL (Applied For Drilling or Completed) 15			26. PROPOSED DEPTH MD: 2799 TVD: 2787				
28. BOND NUMBER COB000359			29. SOURCE OF DRILLING WATER / WATER RIGHTS APPROVAL NUMBER IF APPLICABLE 05-06 (Redd Agri)							
<b>Hole, Casing, and Cement Information</b>										
String	Hole Size	Casing Size	Length	Weight	Grade & Thread	Max Mud Wt.	Cement	Sacks	Yield	Weight
COND	26	20	0 - 60	65.0	H-40 ST&C	8.8	Unknown	100	2.18	12.8
SURF	12.25	8.625	0 - 2100	32.0	J-55 ST&C	8.8	35/65 Poz Class G	540 300	2.45 2.18	12.3 12.8
PROD	7.875	4.5	0 - 2799	11.6	N-80 LT&C	9.2	35/65 Poz	300	2.25	12.5
							35/65 Poz	135	2.26	13.1
<b>ATTACHMENTS</b>										
<b>VERIFY THE FOLLOWING ARE ATTACHED IN ACCORDANCE WITH THE UTAH OIL AND GAS CONSERVATION GENERAL RULES</b>										
<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 checked="" type="checkbox"/> DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)					<input checked="" type="checkbox"/> TOPOGRAPHICAL MAP					
NAME Don Hamilton				TITLE Permitting Agent			PHONE 435 650-3866			
SIGNATURE				DATE 03/03/2015			EMAIL starpoint@etv.net			
API NUMBER ASSIGNED 43037500720000				APPROVAL   Permit Manager						

**CCI-Paradox Upstream, LLC****Big Indian 24-31B-30-25**

SHL: 1777.86' FSL, 1086.49' FWL

NWSW SEC 24 T30S R25E

BHL: 1830' FSL, 1299' FWL

San Juan County, UT

Surface: Federal

Federal Mineral Lease: UTU82597

Onshore Oil & Gas Order No. 1 & No. 2  
**Drilling Plan**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of the subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

Company Contact: Mr. John Warren, CCI Paradox Upstream, LLC (303) 563-5369, Vice President of Operations. For specific questions or concerns regarding this Drilling Program contact company contact.

**1. Estimated Formation Tops**

Age	Formation	*	TVD	Subsea
Jurassic	Morrison		surface	6332
Jurassic	Entrada		832'	5500
Triassic	Dolores		1,562'	4770
Triassic	Chinle		1,928'	4404
Permian	Lower Cutler	G	2,323'	4009
Penn	Honaker Trail	G	2,587'	3745
Penn	HKTR MKR 5	G	2,772'	3560
	Total Depth		2,787'	3545

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All indications of usable water (10,000 ppm or less TDS) shall be reported to the Moab Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first. If noticeable water flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

Note: The operator proposes to protect potable groundwater/aquifers as follows: The surface casing will be set 50' into the Chinle/Cutler formation. Chinle/Cutler will be behind 8-5/8" 32#, J-55, ST&C surface casing set at 2,100' and cemented to surface.

Directional Drilling Program

- a. The 12-1/4" surface hole is drilled from 0' to 600' MD vertically to a Kick-Off Point at 600' MD and build at the rate of 2 degrees per 100' up to an inclination of 6.74 degrees and an azimuth of 76.32 degrees. Maintain to 8-5/8" surface casing TD at 2,100' MD (50' into Chinle).
- b. 7-7/8" production hole maintains the inclination of 6.74 degrees and an azimuth of 76.32 degrees from under surface to 2,461.93' MD, then starts drop at -2 degrees to TD at 2,799.10' MD (2,787 TVD) at 0.0 degrees inclination and 0.0 degrees azimuth.

**2. Casing Program**

Zone Area	Depth (MD)	Hole Size	Outer Diameter	Weight	Grade	Type
Conductor	0' – 60'	26"	20"	65#	H-40	ST&C
Surface	0' – 2,100'	12-1/4"	8-5/8"	32#	J-55	ST&C New
Production	0' – 2,799'	7-7/8"	4-1/2"	11.6#	N-80	LT&C New

Casing Head – 11" x 8-5/8" SOW 5M

Tubing Head – 11" x 4-1/16" 10M

- a. The BLM in Moab, Utah shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.
- b. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all unusable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. The casing setting depth shall be calculated to position the casing seat opposite a competent formation, which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including presence/absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, other minerals, or other unusual characteristics. All indications of usable water shall be reported.
- c. Casing design shall assume a formation pressure gradient of 0.44 psi per foot.
- d. Casing design shall assume fracture gradients from 0.85 to 0.90 psi per foot.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500-psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indication of usable water shall be reported to the authorized office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.

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- i. Surface casing shall have centralizers on the bottom 3 joints of casing (a minimum of one centralizer per joint starting with the shoe joint).
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry. A corrosion/bactericide inhibitor will be placed in the mud system above the cement top to surface.
- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective actions shall be taken.
- l. On exploratory wells such as this, and on well approved for a 3M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- m. The proposed casing integrity design parameters are as follows:

Size Grade	Weight	Burst (psi)	Collapse (psi)	Body Yield (lbs)	Joint Strength (lbs)
8-5/8" J-55	32#	3,930	2,530	503,000	372,000
4-1/2" N-80	11.6#	6,350	7,780	267,000	223,000

- n. Casing design subject to revision based on geologic conditions encountered.

### 3. BOP Specification

Pressure control equipment rating will be 3,000 psi. This equipment will be nipped up on the surface casing and tested to 3000 psi high prior to drilling out. The choke manifold equipment, upper and lower kelly cock, and floor safety valves will be tested to 3000 psi high. The annular preventer will be tested to 1500psi high. Surface casing will be tested to 1500psi prior to drill out. BOP equipment will be tested after any repairs to equipment and at 30 day intervals. The pipe rams and blind rams shall be activated each trip. Weekly BOP drills will be held by each crew.

#### Pressure Control

See attached blowout preventer diagram.

#### BOP Requirements

Bureau of Land Management's minimum specification for pressure control equipment are as follows:

- a. Ram Type 11" Hydraulic double ram with annular, 3,000 psi wp.
- b. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a

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test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10% in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.

- c. Annular type preventers (if used) shall be tested to 70% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.
- d. As a minimum, the above test shall be performed:
  - i. when initially installed
  - ii. whenever any seal subject to test pressure is broken
  - iii. following related repairs and
  - iv. at 30 day intervals
- e. Valves shall be tested from working pressure side during BOPE tests with all down- stream valves open.
- f. When testing the kill line valve(s) shall be held open or the ball removed.
- g. Annular preventers (if used) shall be functionally operated at least weekly.
- h. Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.
- i. A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests. Pressure tests shall apply to all related well control equipment.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The BLM in Moab, Utah shall be notified, at least 24 hours prior to initiating the pressure test, in order to have a BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s) to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

**Statement of Accumulator System and Location of Hydraulic Controls**

The drilling rig has not been selected for this well. Selection will take place after approval of this application is granted. Manual and/or hydraulic controls will be in compliance with the OSO #2 for a 5,000 psi system.

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A remote accumulator will be used. Pressures, capabilities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

#### 4. Cementing Program

Casing String / Interval	Cement
Conductor	<b>Type and Amount</b>
0' – 60' MD	Redimix to surface
Surface Casing	<b>Type and Amount*</b>
0' – 2,100' MD	± 540 sx Class G, 35/65 Poz 12.3 ppg (Yld: 2.45 cf/sk, ± 300 sx Class G 1% CaCl, 12.8 ppg (Yld: 2.18 cf/sk) + additives.
Production Casing	<b>Type and Amount**</b>
0' – 2,799' MD	± 300 sx Class G 35/65 Poz 12.5 ppg (Yld: 2.26 cf/sk) ± 135 sx Glass G 35/65 Poz 13.1 ppg + additives.

- Surface cement volume calculated with 100% excess.
- Production cement volume calculated with 30% excess.

- The BLM office in Moab, UT will be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.
- After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC times shall be recorded in the driller's log.

#### 5. Drilling Fluids

The proposed circulating mediums to be employed in drilling are as follows:

Interval (MD)	Mud Type	Mud Weight	Viscosity	Fluid Loss
0' – 2,100'	Water/Gel Lime Sweeps	8.4 – 8.8ppg	26-40	No Control
2,100' – 2,799'	LSND	8.8 – 9.2ppg	35-45	<10cc/30 min

Mud monitoring equipment to be used is as follows:

- Periodic checks of the mud systems will be made each tour. The mud level will be checked visually.
- The mud system will be run utilizing a closed loop system. There will be sufficient mud on location to ensure well control. Approximately 450 bbls of mud will be held in reserve.
- A mud test shall be performed every 24 hours after mudding to determine, as applicable, density, viscosity, gel strength, static filtration loss and Ph.
- Hazardous substances specifically listed by the EPA as hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

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**6. Auxiliary Equipment**

Auxiliary equipment to be used is as follows:

- a. PVT equipment measuring mud volume, pump strokes, and percent return flow to be installed after setting surface casing and installing BOPE. This system includes alarms and remote terminals located on the rig floor.
- b. Mud logger with gas monitor from bottom of surface casing to TD.
- c. Choke manifold with remote control choke.
- d. Full opening floor valve with drill pipe thread.
- e. Upper and lower Kelly cock.
- f. PVT monitor on pit level, audio and visual below surface casing.
- g. Gas Buster, centrifuge and closed loop mud system.

**7. Evaluation Program**

The anticipated type and amount of testing, logging and coring are as follows:

Casing String	Log Type
Production to Surface Casing:	Quad Combo/DGR/HDIL/ZDL-CN/DAL/TTRM / CBL-Surf. & Prod.
Coring	None
Testing	FMT – 10 planned Lower Cutler & Upper HT ~2,333 MD - ~2,600 MD

**8. Downhole Conditions**

<b>Pressures:</b>	No abnormal conditions are anticipated. Anticipated BHP is $\pm$ 1,231 psi or gradient: 0.44 psi/ft
<b>Temperatures:</b>	Anticipated bottomhole temperature is 100 degrees Fahrenheit.
<b>H<sub>2</sub>S:</b>	None anticipated
<b>Estimated BHP:</b>	$\pm$ 1,231 psi

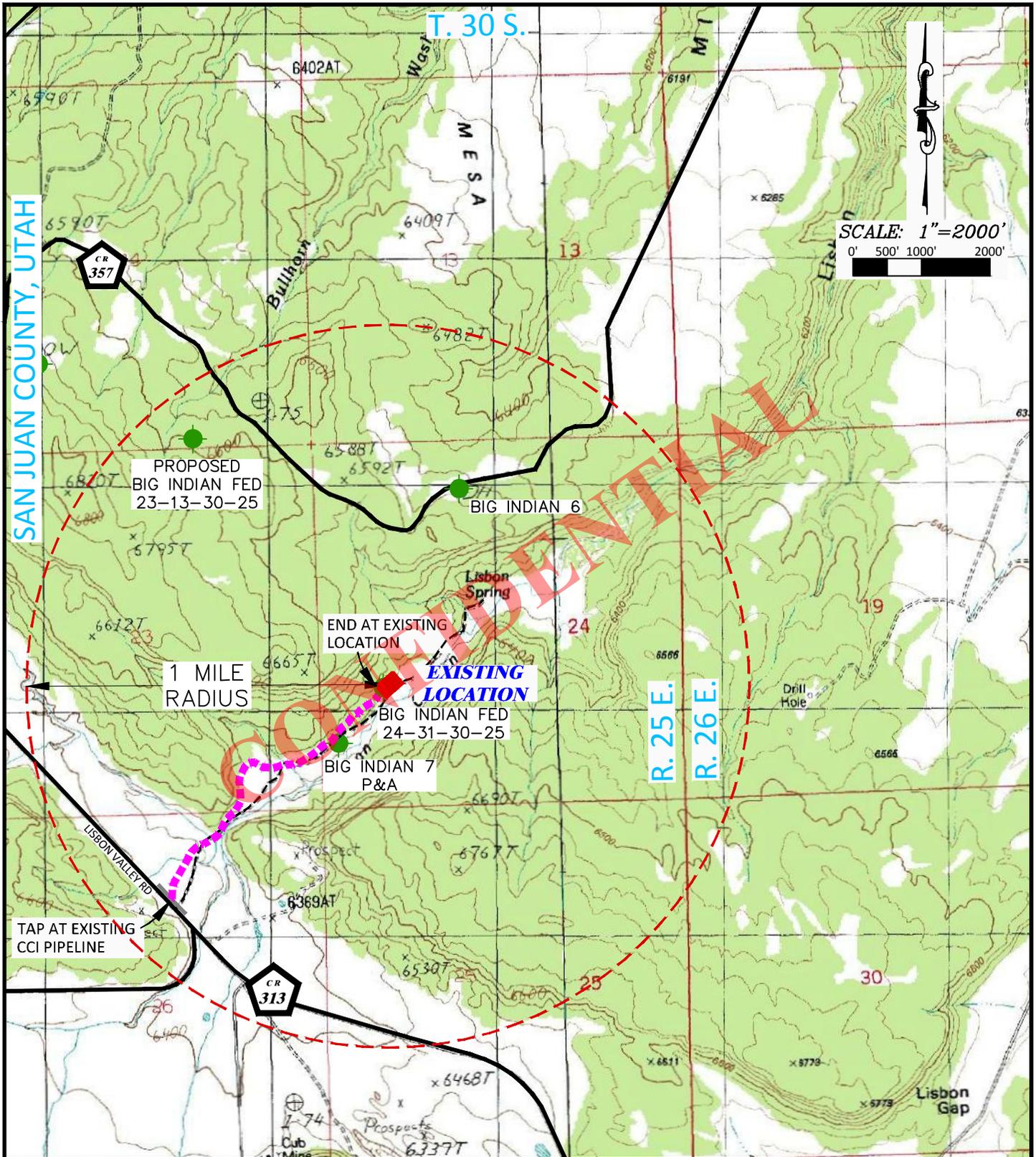
**9. Completion**

The location pad will be sufficient size to accommodate all completion activities and equipment. A string of 2-3/8", 4.7#, N-80, EUE 8rnd will be run and production tubing. A Sundry Notice (SN) will be submitted with a revised completion program is warranted.

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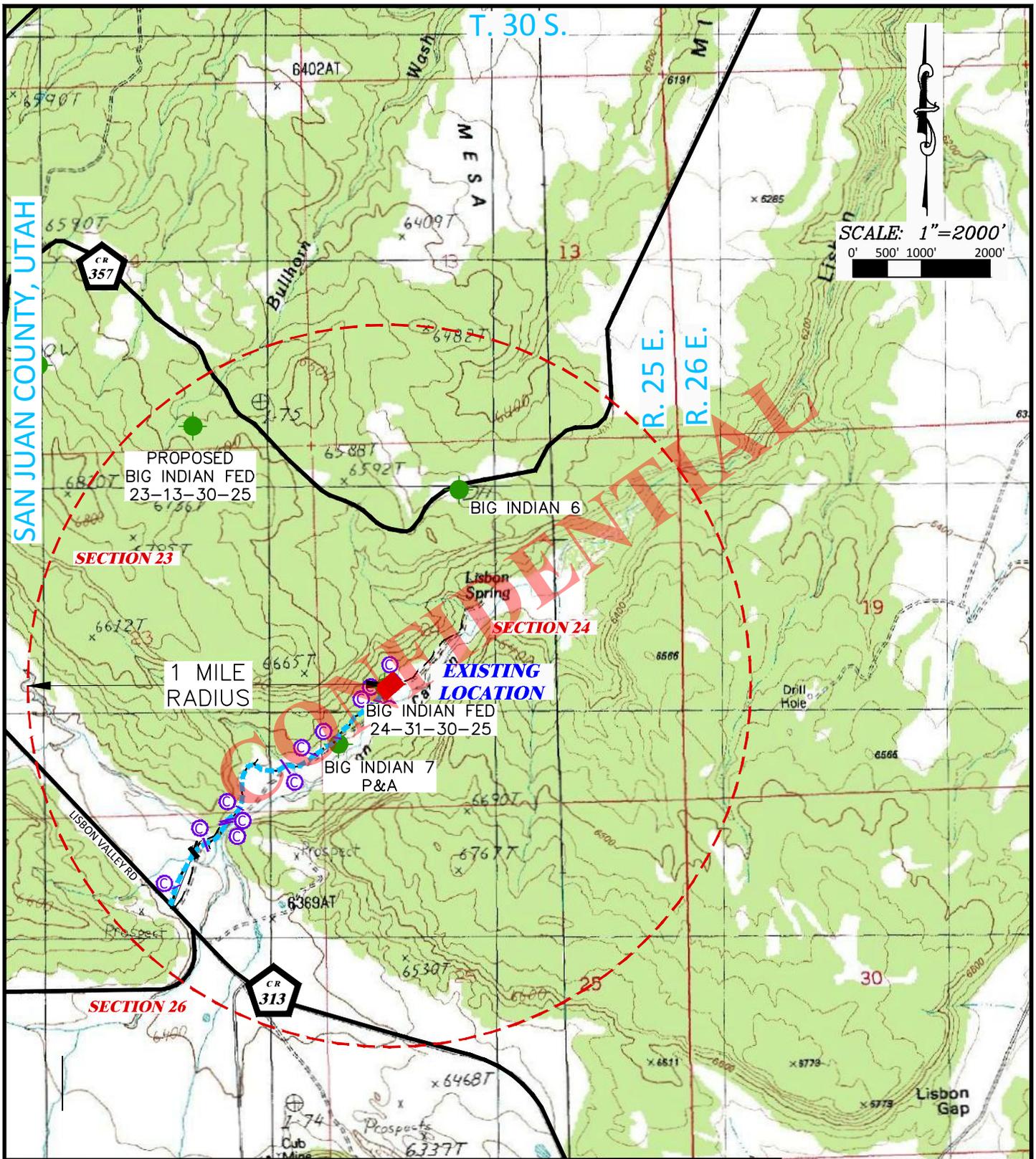




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**BIG INDIAN FED  
 24-31B-30-25 PAD**

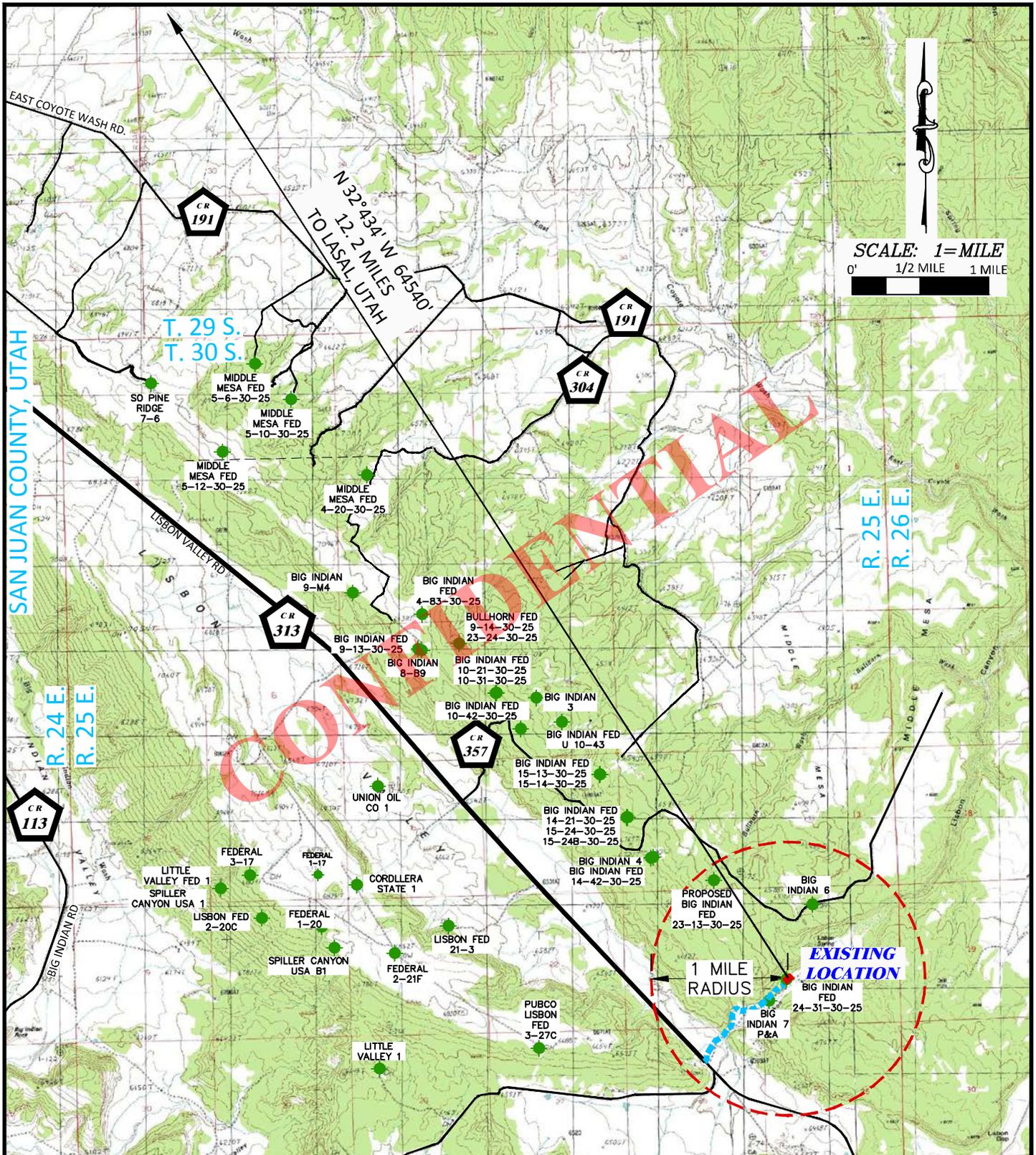
 <p><b>WILLIAM H. SMITH &amp; ASSOCIATES P.C.</b>                  SURVEYING CONSULTANTS                  550 EAST SECOND NORTH      PHONE: 307-875-3638                  GREEN RIVER, WY                      307-875-3639                  www.whsmithpc.com</p>	EXISTING PIPELINE CCI PARADOX UPSTREAM LLC BIG INDIAN FED 24-31B-30-25 NW4SW4 OF SECTION 24, T.30S., R.25E., SLM, SAN JUAN COUNTY, UTAH TOTAL LENGTH: EXISTING
	<p><b>LEGEND</b></p> COUNTY ROAD  EXISTING ROAD  EXISTING PIPELINE  EXISTING WELL PAD  EXISTING WELL 
JOB NO: 2011900.026 REVISIONS: Well name change. 1/15/2015 rr Add well names 1/30/15 rr	DATE DRAWN - BY: 1/10/15- rcr SCALE: 1" = 2000' EXHIBIT 5



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**BIG INDIAN FED  
 24-31B-30-25 PAD**

 <p><b>WILLIAM H. SMITH &amp; ASSOCIATES P.C.</b>                  SURVEYING CONSULTANTS                  550 EAST SECOND NORTH      PHONE: 307-875-3638                  GREEN RIVER, WY                      307-875-3639                  www.whsmithpc.com</p>	EXISTING ACCESS CCI PARADOX UPSTREAM LLC BIG INDIAN FED 24-31B-30-25 NW4SW4 OF SECTION 24, T.30S., R.25E., SLM, SAN JUAN COUNTY, UTAH TOTAL LENGTH: EXISTING
	<p><b>LEGEND</b></p> <p>COUNTY ROAD  EXISTING ROAD  CUVLERT </p> <p>EXISTING ACCESS  EXISTING WELL PAD  EXISTING WELL </p>
JOB NO: 2011900.026 REVISIONS: Well name change. 1/15/2015 rr Add well names 1/30/15 rr	DATE DRAWN - BY: 1/10/15- rcr SCALE: 1" = 2000' EXHIBIT 6



SCALE: 1=MILE  
0' 1/2 MILE 1 MILE

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**BIG INDIAN FED  
24-31B-30-25 PAD**

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GREEN RIVER, WY 307-875-3639  
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EXISTING ACCESS  
CCI PARADOX UPSTREAM LLC  
BIG INDIAN FED 24-31B-30-25  
NW4SW4 OF SECTION 24, T.30S., R.25E., SLM,  
SAN JUAN COUNTY, UTAH

JOB NO: 2011900.026  
REVISIONS: Well name change. 1/15/2015 rr  
Add well names 1/30/15 rr

DATE DRAWN - BY: 1/10/15- rcr  
SCALE: 1" = 1 MILE  
EXHIBIT 7

COUNTY ROAD LEGEND  
EXISTING ROAD   
EXISTING WELL PAD EXISTING WELL

# CCI Paradox Upstream LLC

San Juan Co., Utah

Sec.24-T30S-R25E

Big Indian Fed 24-31B-30-25

Wellbore #1

Plan: Design #1

## Standard Planning Report

15 January, 2015

**CONFIDENTIAL**

# Archer

# CCI Paradox Upstream LLC

Project: San Juan Co., Utah  
 Site: Sec.24-T30S-R25E  
 Well: Big Indian Fed 24-31B-30-25  
 Wellbore: Wellbore #1  
 Design: Design #1  
 Latitude: 38° 9' 39.737 N  
 Longitude: 109° 8' 2.342 W  
 Ground Level: 6311.00  
 WELL @ 6332.00usft (Original Well Elev)



**PROJECT DETAILS:** San Juan Co., Utah

Geodetic System: US State Plane 1983  
 Datum: North American Datum 1983  
 Ellipsoid: GRS 1980  
 Zone: Utah Southern Zone  
 System Datum: Mean Sea Level

**REFERENCE INFORMATION**

Co-ordinate (NE) Reference: Well Big Indian Fed 24-31B-30-25, True North  
 Vertical (TVD) Reference: WELL @ 6332.00usft (Original Well Elev)  
 Section (VS) Reference: Slot - (0.00N, 0.00E)  
 Measured Depth Reference: WELL @ 6332.00usft (Original Well Elev)  
 Calculation Method: Minimum Curvature

**WELL DETAILS:** Big Indian Fed 24-31B-30-25

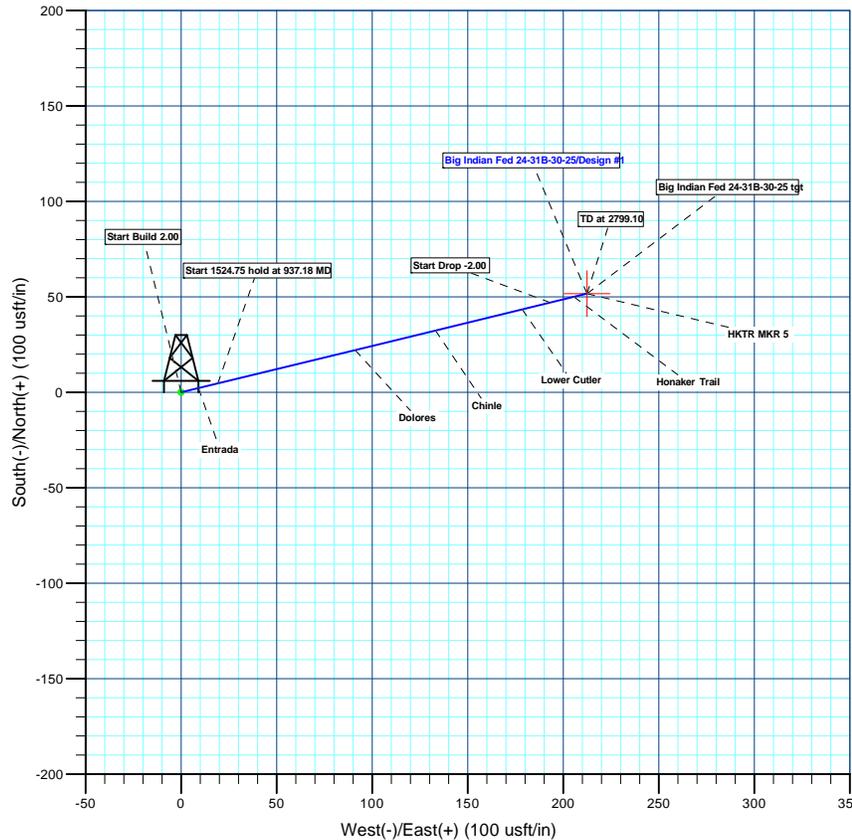
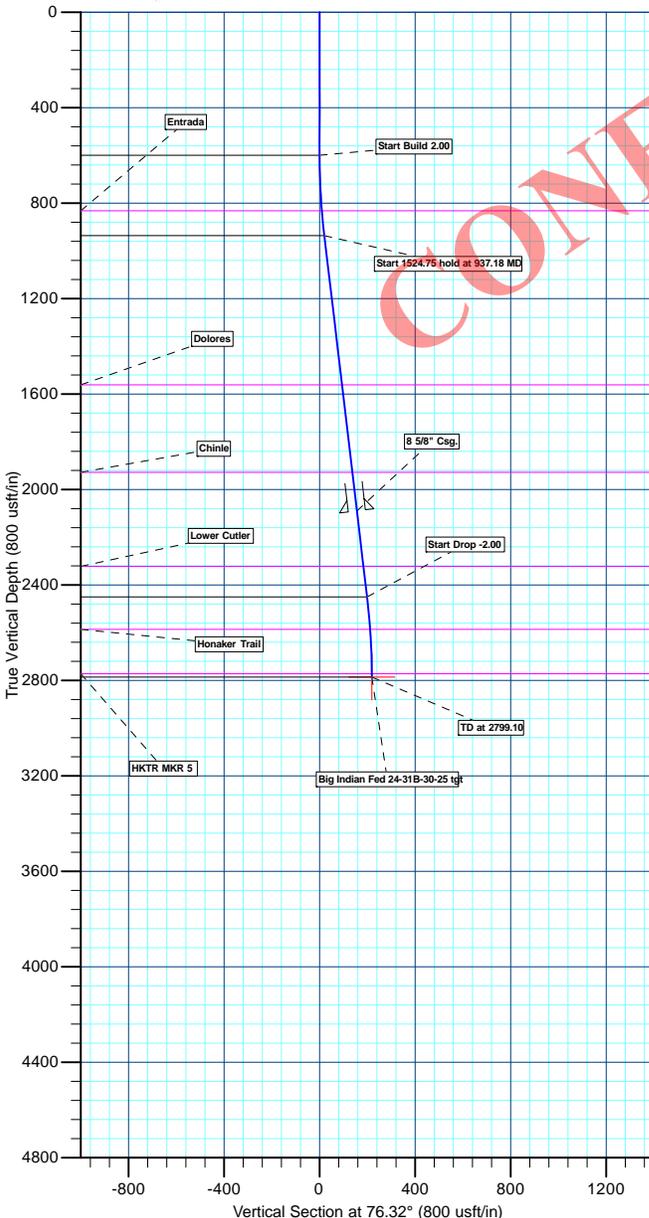
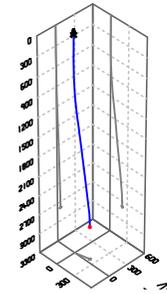
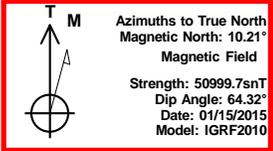
+N/-S	+E/-W	Northing	Ground Level: Easting	6311.00 2320631.854	Latitude	Longitude	Slot
0.00	0.00	10395243.029		38° 9' 39.737 N	109° 8' 2.342 W		

**WELLBORE TARGET DETAILS (MAP CO-ORDINATES AND LAT/LONG)**

Name	TVD	+N/-S	+E/-W	Northing	Easting	Latitude	Longitude	Shape
Big Indian Fed 24-31B-30-25 tgt	2787.00	51.72	212.48	10395300.109	2320842.958	38° 9' 40.248 N	109° 7' 59.682 W	Point

**SECTION DETAILS**

MD	Inc	Azi	TVD	+N/-S	+E/-W	Dleg	TFace	VSect	Annotation
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	Start Build 2.00
937.18	6.74	76.32	936.40	4.69	19.26	2.00	76.32	19.82	Start 1524.75 hold at 937.18 MD
2461.93	6.74	76.32	2450.60	47.03	193.22	0.00	0.00	198.86	Start Drop -2.00
2799.10	0.00	0.00	2787.00	51.72	212.48	2.00	180.00	218.68	TD at 2799.10



**Plan: Design #1 (Big Indian Fed 24-31B-30-25/Wellbore #1)**  
 Created By: Ricky Osburn Date: 16:01, January 15 2015

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B-30-25
<b>Company:</b>	CCI Paradox Upstream LLC	<b>TVD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Project:</b>	San Juan Co., Utah	<b>MD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Site:</b>	Sec.24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B-30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	San Juan Co., Utah		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Southern Zone		

<b>Site</b>	Sec.24-T30S-R25E				
<b>Site Position:</b>		<b>Northing:</b>	10,395,233.887 usft	<b>Latitude:</b>	38° 9' 39.650 N
<b>From:</b>	Lat/Long	<b>Easting:</b>	2,320,615.691 usft	<b>Longitude:</b>	109° 8' 2.548 W
<b>Position Uncertainty:</b>	0.00 usft	<b>Slot Radius:</b>	13-3/16"	<b>Grid Convergence:</b>	1.45 °

<b>Well</b>	Big Indian Fed 24-31B-30-25					
<b>Well Position</b>	<b>+N/-S</b>	8.73 usft	<b>Northing:</b>	10,395,243.029 usft	<b>Latitude:</b>	38° 9' 39.737 N
	<b>+E/-W</b>	16.39 usft	<b>Easting:</b>	2,320,631.854 usft	<b>Longitude:</b>	109° 8' 2.342 W
<b>Position Uncertainty</b>		0.00 usft	<b>Wellhead Elevation:</b>	usft	<b>Ground Level:</b>	6,311.00 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination</b>	<b>Dip Angle</b>	<b>Field Strength</b>
	IGRF2010	2015/01/15	(°)	(°)	(nT)
			10.21	64.32	51,000

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.00
<b>Vertical Section:</b>	<b>Depth From (TVD)</b>	<b>+N/-S</b>	<b>+E/-W</b>	<b>Direction</b>
	(usft)	(usft)	(usft)	(°)
	0.00	0.00	0.00	76.32

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	
937.18	6.74	76.32	936.40	4.69	19.26	2.00	2.00	0.00	76.32	
2,461.93	6.74	76.32	2,450.60	47.03	193.22	0.00	0.00	0.00	0.00	
2,799.10	0.00	0.00	2,787.00	51.72	212.48	2.00	-2.00	0.00	180.00	Big Indian Fed 24-31E

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B-30-25
<b>Company:</b>	CCI Paradox Upstream LLC	<b>TVD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Project:</b>	San Juan Co., Utah	<b>MD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Site:</b>	Sec.24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B-30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
100.00	0.00	0.00	100.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
200.00	0.00	0.00	200.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
300.00	0.00	0.00	300.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
400.00	0.00	0.00	400.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
500.00	0.00	0.00	500.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Start Build 2.00</b>										
600.00	0.00	0.00	600.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
700.00	2.00	76.32	699.98	0.41	1.70	1.75	2.00	2.00	2.00	0.00
800.00	4.00	76.32	799.84	1.65	6.78	6.98	2.00	2.00	2.00	0.00
<b>Entrada</b>										
832.25	4.65	76.32	832.00	2.23	9.14	9.41	2.00	2.00	2.00	0.00
900.00	6.00	76.32	899.45	3.71	15.25	15.69	2.00	2.00	2.00	0.00
<b>Start 1524.75 hold at 937.18 MD</b>										
937.18	6.74	76.32	936.40	4.69	19.26	19.82	2.00	2.00	2.00	0.00
1,000.00	6.74	76.32	998.79	6.43	26.42	27.20	0.00	0.00	0.00	0.00
1,100.00	6.74	76.32	1,098.10	9.21	37.83	38.94	0.00	0.00	0.00	0.00
1,200.00	6.74	76.32	1,197.40	11.99	49.24	50.68	0.00	0.00	0.00	0.00
1,300.00	6.74	76.32	1,296.71	14.76	60.65	62.42	0.00	0.00	0.00	0.00
1,400.00	6.74	76.32	1,396.02	17.54	72.06	74.17	0.00	0.00	0.00	0.00
1,500.00	6.74	76.32	1,495.33	20.32	83.47	85.91	0.00	0.00	0.00	0.00
<b>Dolores</b>										
1,567.14	6.74	76.32	1,562.00	22.18	91.13	93.79	0.00	0.00	0.00	0.00
1,600.00	6.74	76.32	1,594.64	23.10	94.88	97.65	0.00	0.00	0.00	0.00
1,700.00	6.74	76.32	1,693.94	25.87	106.29	109.39	0.00	0.00	0.00	0.00
1,800.00	6.74	76.32	1,793.25	28.65	117.70	121.14	0.00	0.00	0.00	0.00
1,900.00	6.74	76.32	1,892.56	31.43	129.11	132.88	0.00	0.00	0.00	0.00
<b>Chinle</b>										
1,935.69	6.74	76.32	1,928.00	32.42	133.18	137.07	0.00	0.00	0.00	0.00
2,000.00	6.74	76.32	1,991.87	34.20	140.52	144.62	0.00	0.00	0.00	0.00
<b>8 5/8" Csg.</b>										
2,100.00	6.74	76.32	2,091.18	36.98	151.93	156.37	0.00	0.00	0.00	0.00
2,200.00	6.74	76.32	2,190.49	39.76	163.34	168.11	0.00	0.00	0.00	0.00
2,300.00	6.74	76.32	2,289.79	42.54	174.75	179.85	0.00	0.00	0.00	0.00
<b>Lower Cutler</b>										
2,333.44	6.74	76.32	2,323.00	43.47	178.56	183.78	0.00	0.00	0.00	0.00
2,400.00	6.74	76.32	2,389.10	45.31	186.16	191.59	0.00	0.00	0.00	0.00
<b>Start Drop -2.00</b>										
2,461.93	6.74	76.32	2,450.60	47.03	193.22	198.86	0.00	0.00	0.00	0.00
2,500.00	5.98	76.32	2,488.44	48.03	197.32	203.08	2.00	-2.00	0.00	0.00
<b>Honaker Trail</b>										
2,598.94	4.00	76.32	2,587.00	50.07	205.69	211.69	2.00	-2.00	0.00	0.00
2,600.00	3.98	76.32	2,588.06	50.09	205.76	211.77	2.00	-2.00	0.00	0.00
2,700.00	1.98	76.32	2,687.92	51.32	210.81	216.97	2.00	-2.00	0.00	0.00
<b>HKTR MKR 5</b>										
2,784.10	0.30	76.32	2,772.00	51.71	212.44	218.65	2.00	-2.00	0.00	0.00
<b>TD at 2799.10</b>										
2,799.10	0.00	0.00	2,787.00	51.72	212.48	218.68	2.00	-2.00	0.00	0.00

<b>Database:</b>	EDMDBBW	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B-30-25
<b>Company:</b>	CCI Paradox Upstream LLC	<b>TVD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Project:</b>	San Juan Co., Utah	<b>MD Reference:</b>	WELL @ 6332.00usft (Original Well Elev)
<b>Site:</b>	Sec.24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B-30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Big Indian Fed 24-31B-3 - hit/miss target - Shape - Point	0.00	0.00	2,787.00	51.72	212.48	10,395,300.109	2,320,842.958	38° 9' 40.248 N	109° 7' 59.682 W

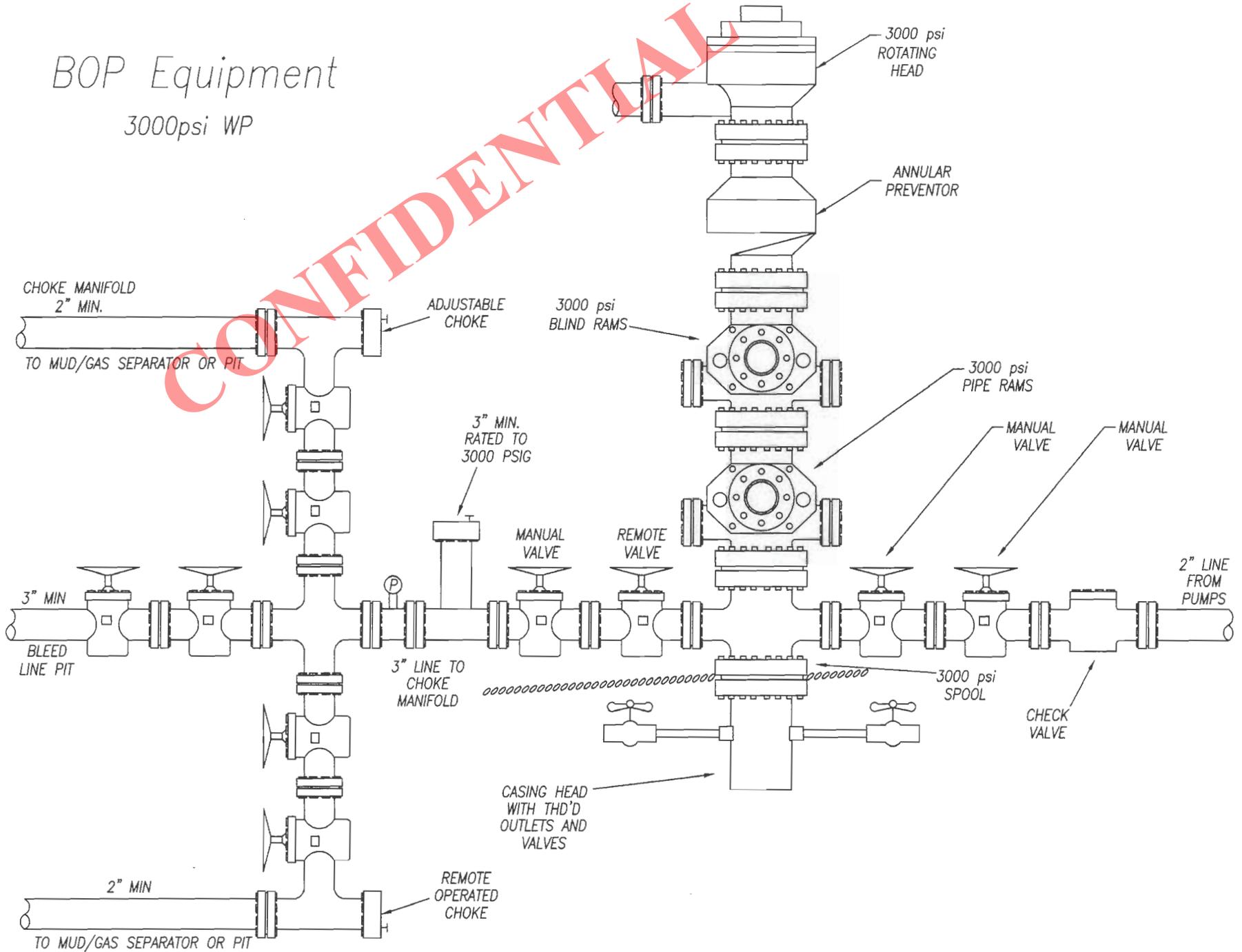
Casing Points					
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")	
2,100.00	2,091.18	8 5/8" Csg.	8-5/8	12-1/4	

Formations						
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)	
832.25	832.00	Entrada		0.00		
1,567.14	1,562.00	Dolores		0.00		
1,935.69	1,928.00	Chinle		0.00		
2,333.44	2,323.00	Lower Cutler		0.00		
2,598.94	2,587.00	Honaker Trail		0.00		
2,784.10	2,772.00	HKTR MKR 5		0.00		

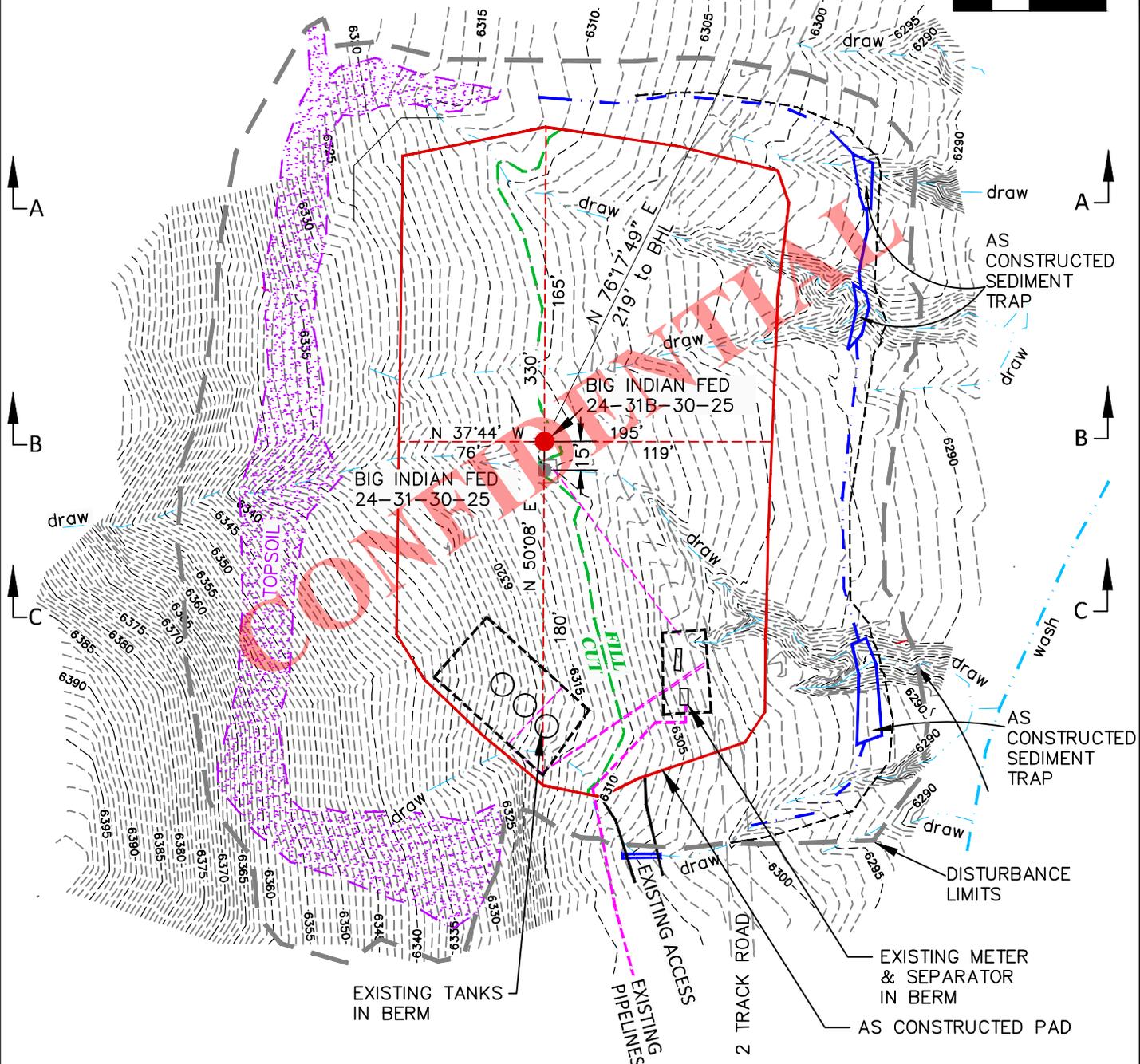
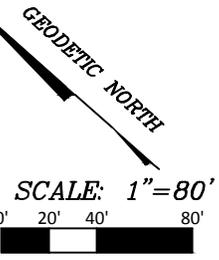
Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
600.00	600.00	0.00	0.00	Start Build 2.00	
937.18	936.40	4.69	19.26	Start 1524.75 hold at 937.18 MD	
2,461.93	2,450.60	47.03	193.22	Start Drop -2.00	
2,799.10	2,787.00	51.72	212.48	TD at 2799.10	

# BOP Equipment

3000psi WP



PRE CONSTRUCTION ELEVATION (NAVD88): 6310.3'  
 GRADED ELEVATION (NAVD88): 6310.5'  
 AREA OF DISTURBANCE: 3.6 ACRES  
 DRAINS TOWARDS COYOTE WASH



**CONFIDENTIALITY NOTES:**  
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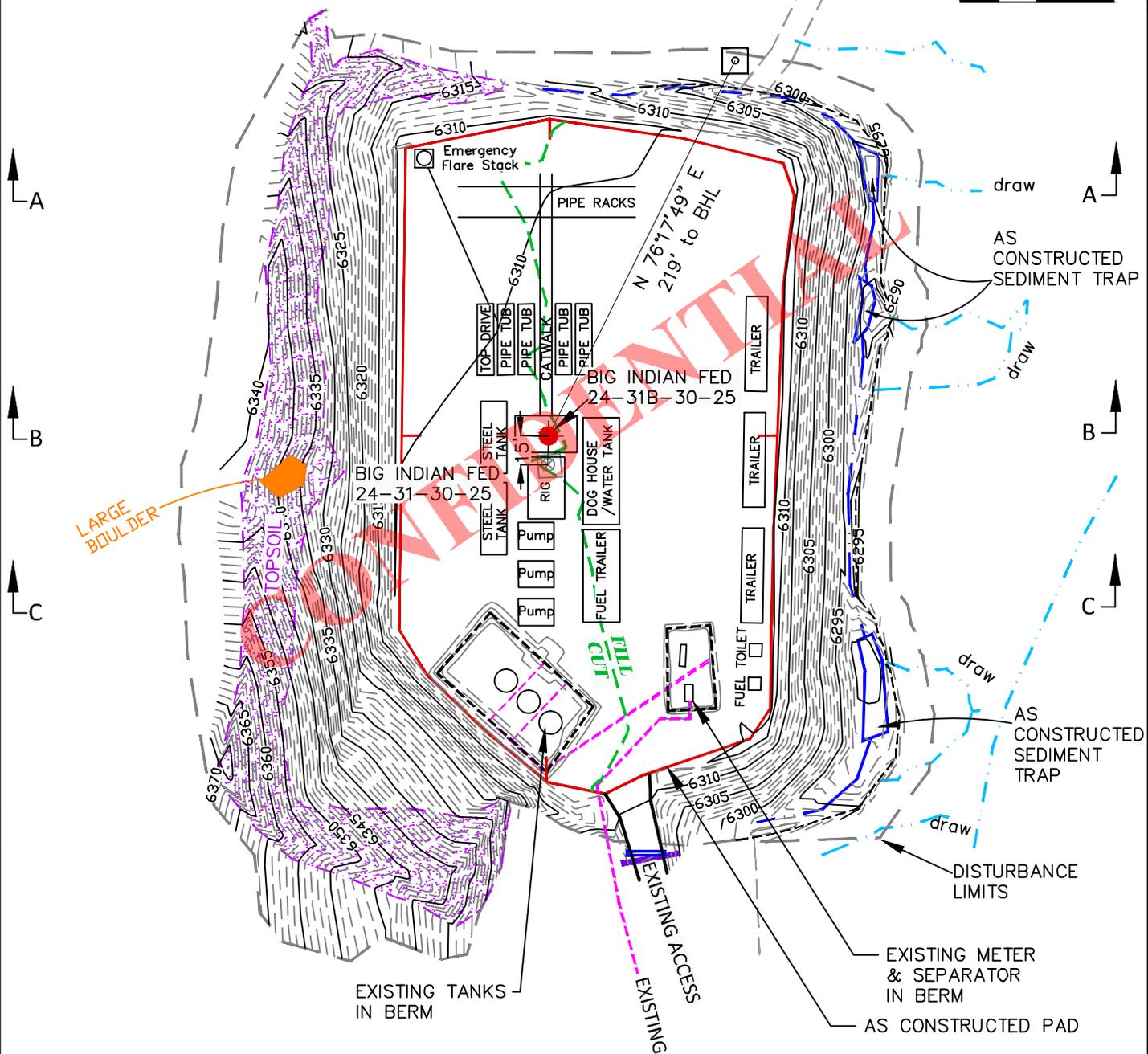
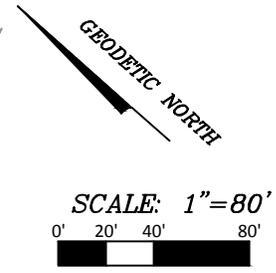
**BIG INDIAN FED 24-31B-30-25 PAD**

<p>WILLIAM H. SMITH &amp; ASSOCIATES P.C.                  SURVEYING CONSULTANTS                  550 EAST SECOND NORTH      PHONE: 307-875-3638                  GREEN RIVER, WY                      307-875-3639                  www.whsmithpc.com</p>	BIG INDIAN FED 24-31B-30-25 NW4SW4 SECTION 24, T30S, R25E, SLM.    SAN JUAN COUNTY, UTAH ESTIMATED EARTHWORK VOLUMES IN CUBIC YARDS			
	ITEM	CUT	FILL	TOPSOIL
PAD	EXISTING	EXISTING	EXISTING	EXISTING
PIT	NONE			0 CY
TOTAL	EXISTING	EXISTING	EXISTING	EXISTING

JOB NO: 2011900.026  
 REVISIONS: Well name change. 1/15/2015 rr

DATE DRAWN - BY: 1/10/15 - rcr  
 SCALE: 1" = 80'  
 EXHIBIT 2      PAGE 1 OF 3

PRE CONSTRUCTION ELEVATION (NAVD88): 6310.3'  
 GRADED ELEVATION (NAVD88): 6310.5'  
 AREA OF DISTURBANCE: 3.6 ACRES  
 DRAINS TOWARDS COYOTE WASH

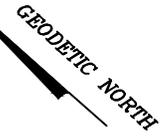


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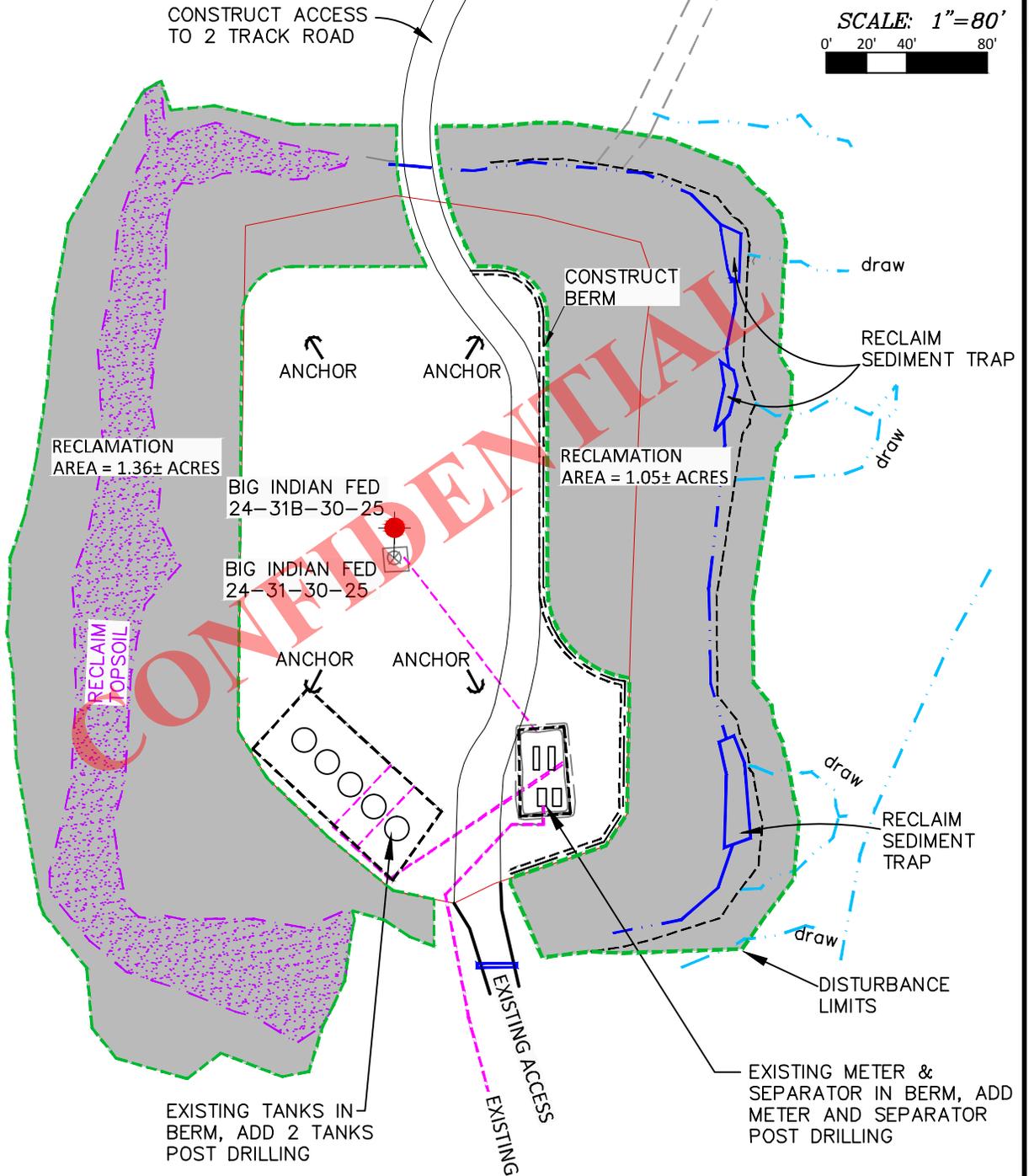
BIG INDIAN FED 24-31B-30-25 PAD

	WILLIAM H. SMITH & ASSOCIATES P.C. SURVEYING CONSULTANTS 550 EAST SECOND NORTH      PHONE: 307-875-3638 GREEN RIVER, WY                      307-875-3639 www.whsmithpc.com	<b>RIG LAYOUT &amp; AS CONSTRUCTED CONTOURS</b> CCI PARADOX UPSTREAM LLC BIG INDIAN FED 24-31B-30-25 NW4SW4 SECTION 24 T. 30 S., R. 25 E., SALT LAKE P.M. SAN JUAN COUNTY, UTAH
	JOB NO: 2011900.026      DATE DRAWN - BY: 1/10/15 - rcr REVISIONS: Well name change. 1/15/2015 rr      SCALE: 1" = 80' EXHIBIT 2      PAGE 2 OF 3	

FINISHED ELEVATION (NAVD88): 6310.5'  
 TOTAL AREA OF RECLAMATION = 2.41± ACRES  
 DRAINS TOWARDS COYOTE WASH



SCALE: 1"=80'  
 0' 20' 40' 80'



**CONFIDENTIALITY NOTES:**

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BIG INDIAN FED 24-31B-30-25 PAD



**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH PHONE: 307-875-3638  
 GREEN RIVER, WY 307-875-3639  
 www.whsmithpc.com

**RECLAMATION PLAN**  
 CCI PARADOX UPSTREAM LLC  
 BIG INDIAN FED 24-31B-30-25  
 NW4SW4 SECTION 24  
 T. 30 S., R. 25 E., SALT LAKE P.M.  
 SAN JUAN COUNTY, UTAH

JOB NO: 2011900.026

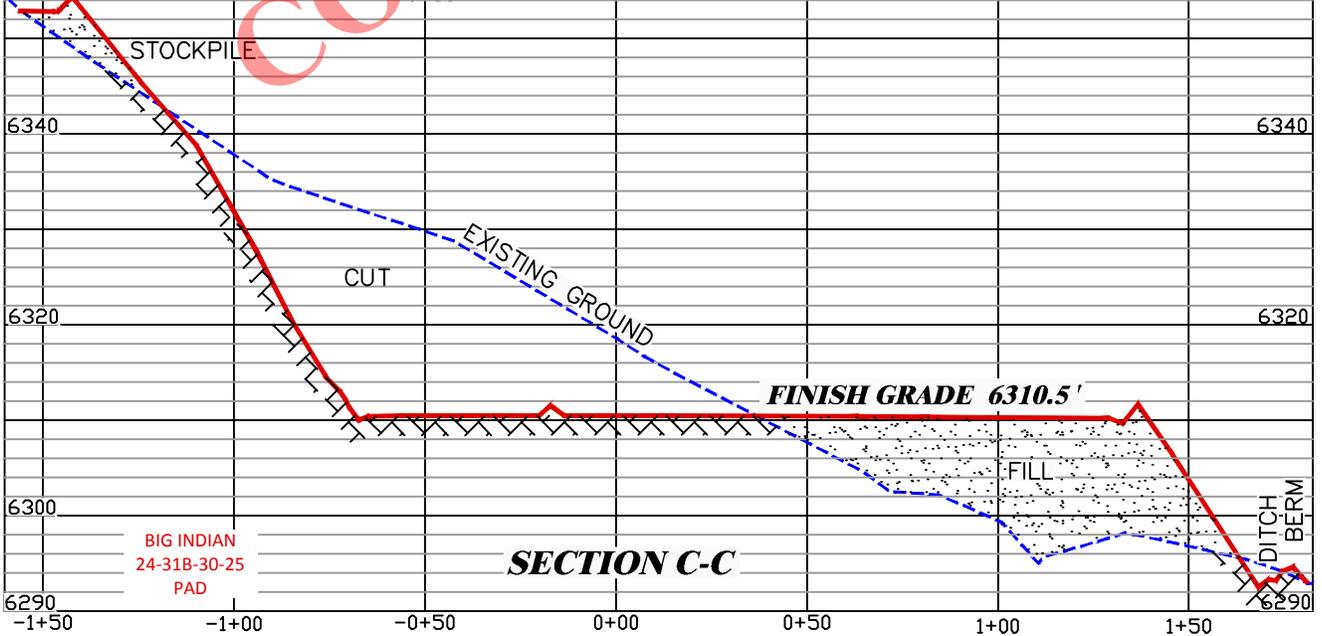
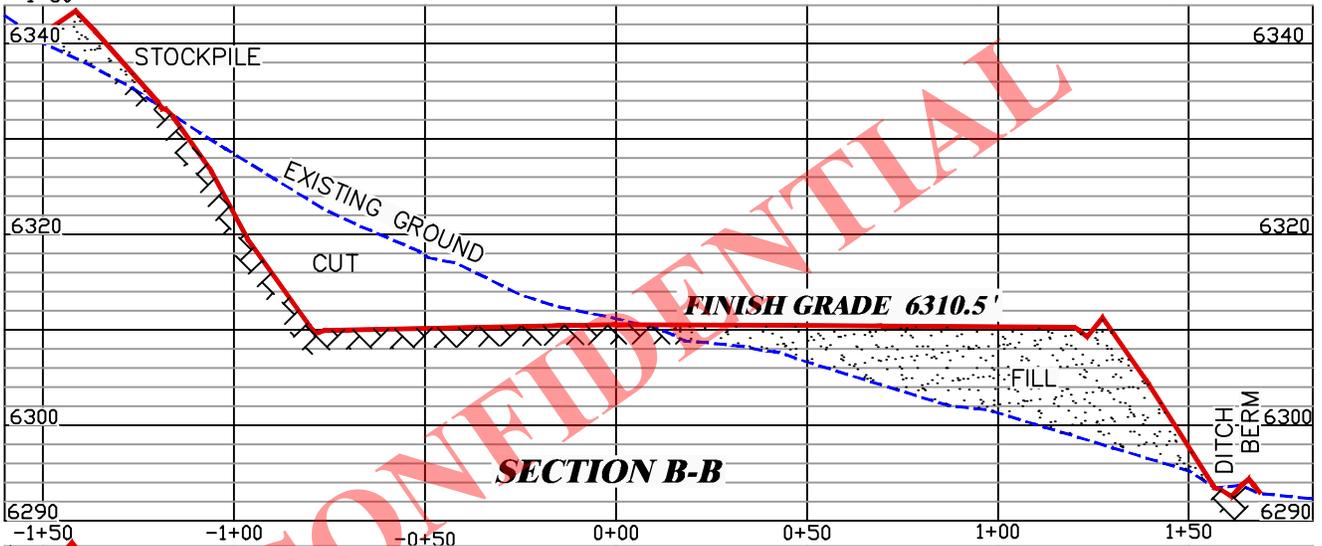
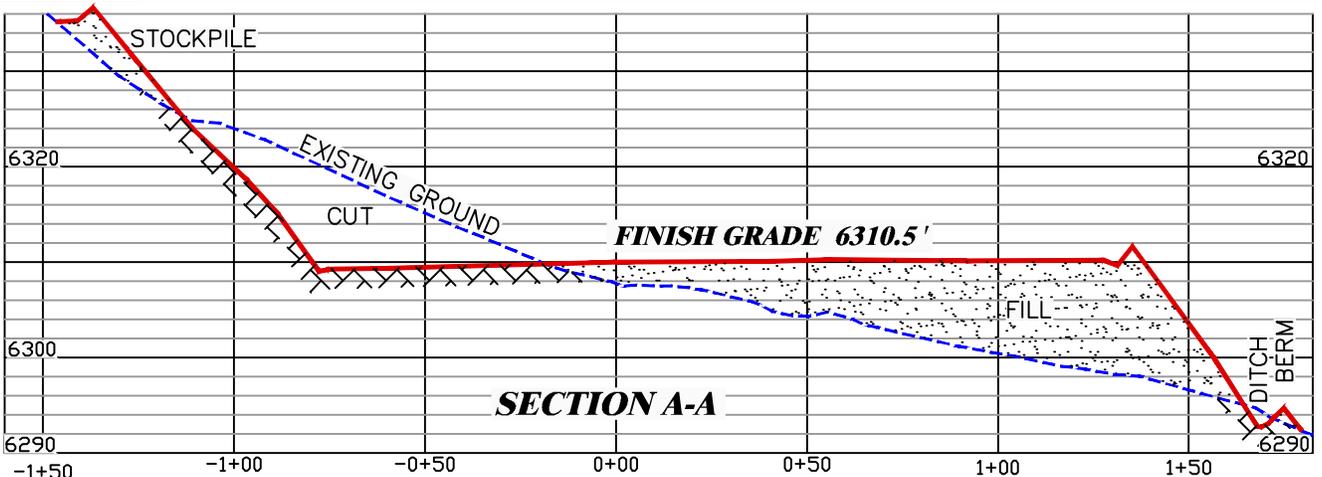
DATE DRAWN - BY: 1/10/15 - rcr

REVISIONS: Well name change. 1/15/2015 rr

SCALE: 1" = 80'

EXHIBIT 2

PAGE 3 OF 3

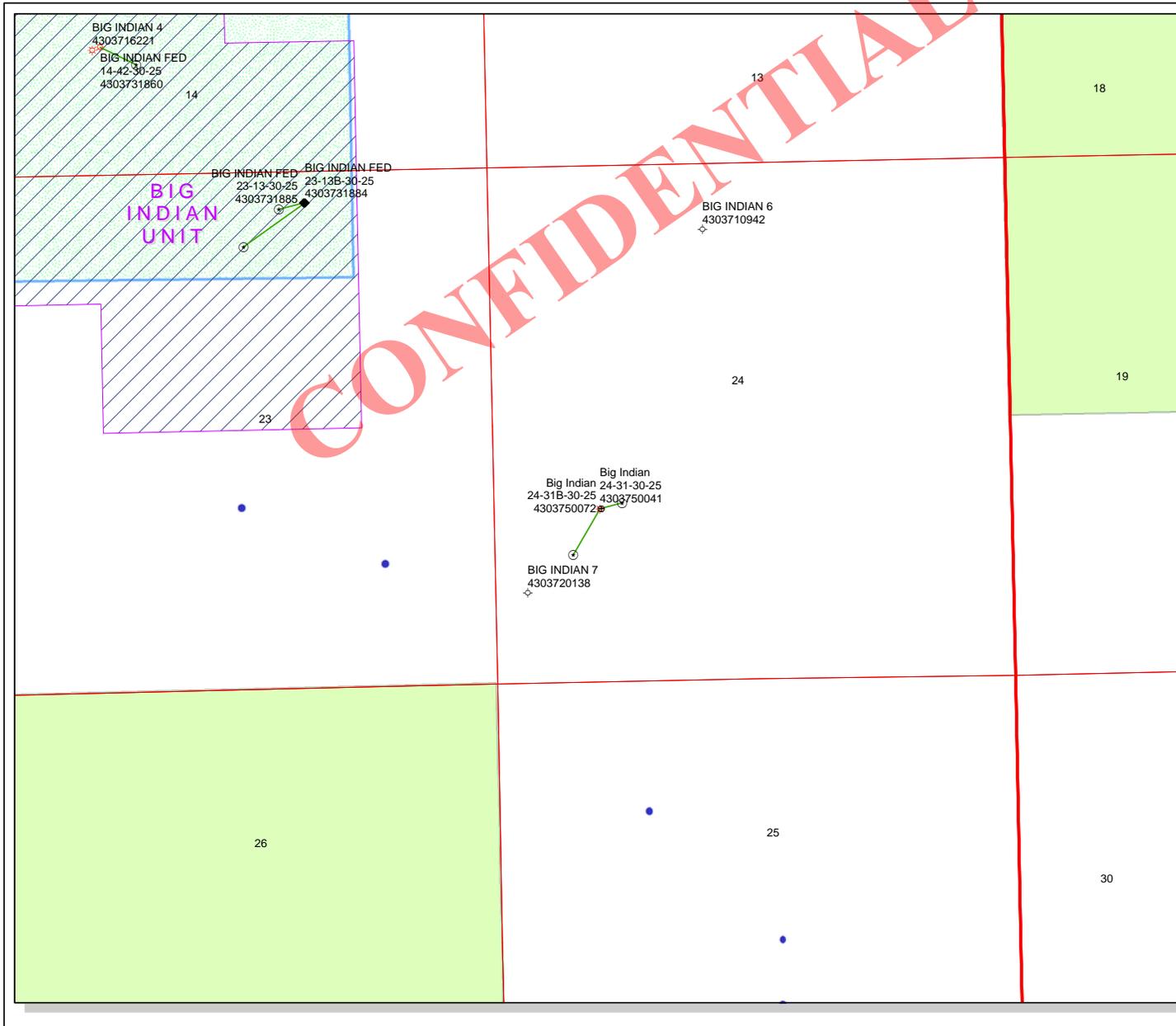


**WILLIAM H. SMITH & ASSOCIATES P.C.**  
 SURVEYING CONSULTANTS  
 550 EAST SECOND NORTH PHONE: 307-875-3638  
 GREEN RIVER, WY 307-875-3639  
 www.whsmithpc.com

**PAD CROSS SECTIONS**  
 CCI PARADOX UPSTREAM LLC  
 BIG INDIAN FED 24-31B-30-25  
 NW4SW4 SECTION 24  
 T. 30 S., R. 25 E., SALT LAKE P.M.  
 SAN JUAN COUNTY, UTAH

JOB NO: 2011900.026  
 REVISIONS: Well name change.  
 1/15/2015 rr

DATE DRAWN - BY: 1/10/15 - rcr  
 SCALE: 1" = 50' HORIZONTAL, 1" = 20' VERTICAL  
 EXHIBIT 3 PAGE 1 OF 1



API Number: 4303750072

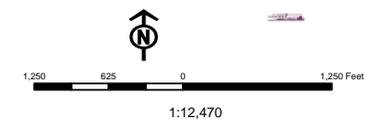
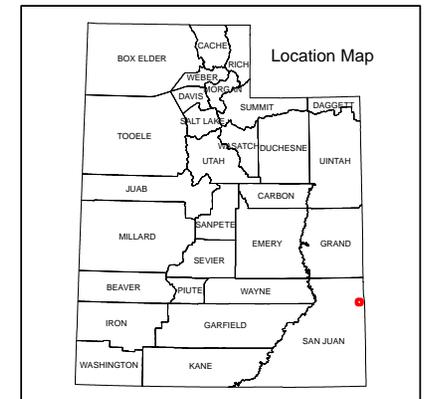
Well Name: Big Indian 24-31B-30-25

Township: T30.0S Range: R25.0E Section: 24 Meridian: S

Operator: CCI PARADOX UPSTREAM, LLC

Map Prepared: 3/5/2015  
Map Produced by Diana Mason

Wells Query		Units	
<b>Status</b>		<b>STATUS</b>	
◆ APD - Approved Permit	◆	ACTIVE	■
○ DRL - Spudded (Drilling Commenced)	○	EXPLORATORY	■
✂ GW - Gas Injection	✂	GAS STORAGE	■
★ GS - Gas Storage	★	NF PP OIL	■
⊕ LOC - New Location	⊕	NF SECONDARY	■
⊖ OPS - Operation Suspended	⊖	PI OIL	■
⊘ PA - Plugged Abandoned	⊘	PP GAS	■
⊙ PGW - Producing Gas Well	⊙	PP GEOTHERML	■
⊚ POW - Producing Oil Well	⊚	PP OIL	■
⊛ SGW - Shut-in Gas Well	⊛	SECONDARY	■
⊜ SOW - Shut-in Oil Well	⊜	TERMINATED	■
⊝ TA - Temp. Abandoned	⊝		
○ TW - Test Well	○	<b>Fields</b>	
⊖ WDW - Water Disposal	⊖	<b>STATUS</b>	
⊙ WW - Water Injection Well	⊙	Unknown	■
● WSW - Water Supply Well	●	ABANDONED	■
		ACTIVE	■
		COMBINED	■
		INACTIVE	■
		STORAGE	■
		TERMINATED	■





Castleton Commodities International Paradox Upstream, LLC  
600 17<sup>th</sup> Street, Suite 1900S  
Denver, CO 80202

T 303-825-0685  
F 303-728-2215

April 27<sup>th</sup>, 2015

Ms. Diana Whitney  
Utah Department of Natural Resources  
Division of Oil, Gas & Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84116

RE: Rule R649-3-11. Directional Drilling R649-3-11  
Big Indian 24-31B-30-25: 1778' FSL & 1086' FWL (Surface Hole) NWSW,  
1830' FSL & 1299' FWL (Bottom Hole) NWSW,  
Sec. 24, T30S, R25E, S.L.P.M.  
San Juan County, Utah

Dear Ms. Whitney:

Pursuant to the filing of CCI Paradox LLC's Application for Permit to Drill regarding the above referenced well on March 3<sup>rd</sup>, 2015, we are hereby submitting this letter in accordance with Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of wells.

- CCI Paradox Upstream LLC is permitting this well as a directional well in order to minimize surface disturbance. Locating the well at the surface location and drilling directionally from this location, CCI Paradox Upstream LLC will be able to utilize the existing road and pipelines in the area.
- Furthermore, CCI Paradox Upstream LLC hereby certifies that it is the sole working interest owner within 460 feet of the entire directional wellbore.

Therefore, based on the above stated information, CCI Paradox Upstream LLC requests the permit be granted pursuant to R649-3-11. Should you have any questions or comments, please do not hesitate to contact the undersigned at (303) 728-2216 or [Kelsey.Silipo@cci.com](mailto:Kelsey.Silipo@cci.com).

Sincerely,

A handwritten signature in blue ink that reads "Kelsey E. Silipo".

Kelsey E. Silipo  
Landman

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 3/3/2015

API NO. ASSIGNED: 43037500720000

WELL NAME: Big Indian 24-31B-30-25

OPERATOR: CCI PARADOX UPSTREAM, LLC (N3945)

PHONE NUMBER: 435 650-3866

CONTACT: Don Hamilton

PROPOSED LOCATION: NWSW 24 300S 250E

Permit Tech Review: 

SURFACE: 1778 FSL 1086 FWL

Engineering Review: 

BOTTOM: 1830 FSL 1299 FWL

Geology Review: 

COUNTY: SAN JUAN

LATITUDE: 38.16102

LONGITUDE: -109.13396

UTM SURF EASTINGS: 663481.00

NORTHINGS: 4225326.00

FIELD NAME: UNDESIGNATED

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-82597

PROPOSED PRODUCING FORMATION(S): HONAKER TRAIL

SURFACE OWNER: 1 - Federal

COALBED METHANE: NO

## RECEIVED AND/OR REVIEWED:

- PLAT
- Bond: FEDERAL - COB000359
- Potash
- Oil Shale 190-5
- Oil Shale 190-3
- Oil Shale 190-13
- Water Permit: 05-06 (Redd Agri)
- RDCC Review:
- Fee Surface Agreement
- Intent to Commingle

Commingling Approved

## LOCATION AND SITING:

- R649-2-3.
- Unit:
- R649-3-2. General
- R649-3-3. Exception
- Drilling Unit
- Board Cause No: R649-3-11
- Effective Date:
- Siting:
- R649-3-11. Directional Drill

Comments: Presite Completed

Stipulations: 1 - Exception Location - bhill  
4 - Federal Approval - dmason  
15 - Directional - dmason  
23 - Spacing - dmason



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*

## Permit To Drill

\*\*\*\*\*

**Well Name:** Big Indian 24-31B-30-25  
**API Well Number:** 43037500720000  
**Lease Number:** UTU-82597  
**Surface Owner:** FEDERAL  
**Approval Date:** 4/28/2015

### Issued to:

CCI PARADOX UPSTREAM, LLC, 600 17th Street, Suite 1900S, Denver, CO 80202

### Authority:

Pursuant to Utah Code Ann. 40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of R649-3-11. The expected producing formation or pool is the HONAKER TRAIL Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

### Duration:

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

### Exception Location:

Appropriate information has been submitted to DOGM and administrative approval of the requested exception location is hereby granted.

### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

### Conditions of Approval:

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

This proposed well is located in an area for which drilling units (well spacing patterns) have not been established through an order of the Board of Oil, Gas and Mining (the "Board"). In order to avoid the possibility of waste or injury to correlative rights, the operator is requested, once the well has been drilled,

completed, and has produced, to analyze geological and engineering data generated therefrom, as well as any similar data from surrounding areas if available. As soon as is practicable after completion of its analysis, and if the analysis suggests an area larger than the quarter-quarter section upon which the well is located is being drained, the operator is requested to seek an appropriate order from the Board establishing drilling and spacing units in conformance with such analysis by filing a Request for Agency Action with the Board.

**Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

- Within 24 hours following the spudding of the well - contact Carol Daniels at 801-538-5284

(please leave a voicemail message if not available)

OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website

at <http://oilgas.ogm.utah.gov>

**Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) - due within 5 days of spudding the well
- Monthly Status Report (Form 9) - due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) - due prior to implementation
- Written Notice of Emergency Changes (Form 9) - due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) - due prior to implementation
- Report of Water Encountered (Form 7) - due within 30 days after completion
- Well Completion Report (Form 8) - due within 30 days after completion or plugging

**Approved By:**



For John Rogers  
Associate Director, Oil & Gas

<b>STATE OF UTAH</b> DEPARTMENT OF NATURAL RESOURCES DIVISION OF OIL, GAS, AND MINING	FORM 9  5. LEASE DESIGNATION AND SERIAL NUMBER: UTU-82597
<b>SUNDRY NOTICES AND REPORTS ON WELLS</b>  Do not use this form for proposals to drill new wells, significantly deepen existing wells below current bottom-hole depth, reenter plugged wells, or to drill horizontal laterals. Use APPLICATION FOR PERMIT TO DRILL form for such proposals.	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:  7. UNIT or CA AGREEMENT NAME:
1. TYPE OF WELL Gas Well	8. WELL NAME and NUMBER: Big Indian 24-31B-30-25
2. NAME OF OPERATOR: CCI PARADOX UPSTREAM, LLC	9. API NUMBER: 43037500720000
3. ADDRESS OF OPERATOR: 811 Main Street, Suite 3500 , Houston, TX, 77002	PHONE NUMBER: 281 714-2949 Ext
4. LOCATION OF WELL FOOTAGES AT SURFACE: 1778 FSL 1086 FWL QTR/QTR, SECTION, TOWNSHIP, RANGE, MERIDIAN: Qtr/Qtr: NWSW Section: 24 Township: 30.0S Range: 25.0E Meridian: S	9. FIELD and POOL or WILDCAT: UNDESIGNATED  COUNTY: SAN JUAN  STATE: UTAH

11. CHECK APPROPRIATE BOXES TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION		
<input checked="" type="checkbox"/> NOTICE OF INTENT Approximate date work will start: 9/1/2015  <input type="checkbox"/> SUBSEQUENT REPORT Date of Work Completion:  <input type="checkbox"/> SPUD REPORT Date of Spud:  <input type="checkbox"/> DRILLING REPORT Report Date:	<input type="checkbox"/> ACIDIZE  <input checked="" type="checkbox"/> CHANGE TO PREVIOUS PLANS  <input type="checkbox"/> CHANGE WELL STATUS  <input type="checkbox"/> DEEPEN  <input type="checkbox"/> OPERATOR CHANGE  <input type="checkbox"/> PRODUCTION START OR RESUME  <input type="checkbox"/> REPERFORATE CURRENT FORMATION  <input type="checkbox"/> TUBING REPAIR  <input type="checkbox"/> WATER SHUTOFF  <input type="checkbox"/> WILDCAT WELL DETERMINATION	<input type="checkbox"/> ALTER CASING  <input type="checkbox"/> CHANGE TUBING  <input type="checkbox"/> COMMINGLE PRODUCING FORMATIONS  <input type="checkbox"/> FRACTURE TREAT  <input type="checkbox"/> PLUG AND ABANDON  <input type="checkbox"/> RECLAMATION OF WELL SITE  <input type="checkbox"/> SIDETRACK TO REPAIR WELL  <input type="checkbox"/> VENT OR FLARE  <input type="checkbox"/> SI TA STATUS EXTENSION  <input checked="" type="checkbox"/> OTHER	<input type="checkbox"/> CASING REPAIR  <input type="checkbox"/> CHANGE WELL NAME  <input type="checkbox"/> CONVERT WELL TYPE  <input type="checkbox"/> NEW CONSTRUCTION  <input type="checkbox"/> PLUG BACK  <input type="checkbox"/> RECOMPLETE DIFFERENT FORMATION  <input type="checkbox"/> TEMPORARY ABANDON  <input type="checkbox"/> WATER DISPOSAL  <input type="checkbox"/> APD EXTENSION  OTHER: <input type="text" value="CHANGE BHL"/>

12. DESCRIBE PROPOSED OR COMPLETED OPERATIONS. Clearly show all pertinent details including dates, depths, volumes, etc.

CCI PARADOX UPSTREAM LLC IS PROPOSING TO CHANGE THE BOTTOM HOLE LOCATION OF THE BIG INDIAN FED 24-31B-30-25. PLEASE SEE THE ATTACHED REVISED WELL PLAT, DIRECTIONAL PLAN, DRILLING PLAN AND DIRECTIONAL DRILLING LETTER. THANK YOU,

**Approved by the**  
**August 19, 2015**  
**Oil, Gas and Mining**

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

By: 

NAME (PLEASE PRINT) Ashley Noonan	PHONE NUMBER 720 319-6830	TITLE Regulatory Analyst
SIGNATURE N/A	DATE 8/11/2015	





# **Castleton Commodities International, LLC**

**San Juan, Ut  
Sec. 24-T30S-R25E  
Big Indian Fed 24-31B--30-25**

**Wellbore #1**

**Plan: Design #1**

## **DDC Well Planning Report**

**01 June, 2015**





**HP**  
Well Planning Report



<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B--30-25
<b>Company:</b>	Castleton Commodities International, LLC	<b>TVD Reference:</b>	Well @ 6332.0usft
<b>Project:</b>	San Juan, Ut	<b>MD Reference:</b>	Well @ 6332.0usft
<b>Site:</b>	Sec. 24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B--30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

<b>Project</b>	San Juan, Ut		
<b>Map System:</b>	US State Plane 1983	<b>System Datum:</b>	Mean Sea Level
<b>Geo Datum:</b>	North American Datum 1983		
<b>Map Zone:</b>	Utah Southern Zone		

<b>Site</b>	Sec. 24-T30S-R25E				
<b>Site Position:</b>	<b>Northing:</b>	10,395,243.03 usft	<b>Latitude:</b>	38° 9' 39.737 N	
<b>From:</b> Map	<b>Easting:</b>	2,320,631.86 usft	<b>Longitude:</b>	109° 8' 2.342 W	
<b>Position Uncertainty:</b>	0.0 usft	<b>Slot Radius:</b>	13-3/16 "	<b>Grid Convergence:</b>	1.45 °

<b>Well</b>	Big Indian Fed 24-31B--30-25					
<b>Well Position</b>	<b>+N/-S</b>	0.0 usft	<b>Northing:</b>	10,395,243.03 usft	<b>Latitude:</b>	38° 9' 39.737 N
	<b>+E/-W</b>	0.0 usft	<b>Easting:</b>	2,320,631.86 usft	<b>Longitude:</b>	109° 8' 2.342 W
<b>Position Uncertainty</b>		0.0 usft	<b>Wellhead Elevation:</b>	0.0 usft	<b>Ground Level:</b>	6,311.0 usft

<b>Wellbore</b>	Wellbore #1				
<b>Magnetics</b>	<b>Model Name</b>	<b>Sample Date</b>	<b>Declination (°)</b>	<b>Dip Angle (°)</b>	<b>Field Strength (nT)</b>
	IGRF2015	6/1/2015	10.22	64.31	50,869

<b>Design</b>	Design #1			
<b>Audit Notes:</b>				
<b>Version:</b>	<b>Phase:</b>	PLAN	<b>Tie On Depth:</b>	0.0
<b>Vertical Section:</b>	<b>Depth From (TVD) (usft)</b>	<b>+N/-S (usft)</b>	<b>+E/-W (usft)</b>	<b>Direction (°)</b>
	0.0	0.0	0.0	80.94

<b>Plan Sections</b>										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,177.5	11.55	80.94	1,173.6	9.1	57.3	2.00	2.00	0.00	80.94	
2,238.7	11.55	80.94	2,213.3	42.6	267.1	0.00	0.00	0.00	0.00	
2,816.2	0.00	0.00	2,786.9	51.7	324.4	2.00	-2.00	0.00	180.00	
3,000.0	0.00	0.00	2,970.7	51.7	324.4	0.00	0.00	0.00	0.00	



**HP**  
Well Planning Report



<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B--30-25
<b>Company:</b>	Castleton Commodities International, LLC	<b>TVD Reference:</b>	Well @ 6332.0usft
<b>Project:</b>	San Juan, Ut	<b>MD Reference:</b>	Well @ 6332.0usft
<b>Site:</b>	Sec. 24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B--30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Planned Survey									
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0.0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0.0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
<b>Build @ 2° / 100'</b>									
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	2.00	80.94	700.0	0.3	1.7	1.7	2.00	2.00	0.00
800.0	4.00	80.94	799.8	1.1	6.9	7.0	2.00	2.00	0.00
<b>Entrada</b>									
832.3	4.65	80.94	832.0	1.5	9.3	9.4	2.00	2.00	0.00
900.0	6.00	80.94	899.5	2.5	15.5	15.7	2.00	2.00	0.00
1,000.0	8.00	80.94	998.7	4.4	27.5	27.9	2.00	2.00	0.00
1,100.0	10.00	80.94	1,097.5	6.9	43.0	43.5	2.00	2.00	0.00
<b>EOB @ 11.55° Inc / 80.94° Azm</b>									
1,177.5	11.55	80.94	1,173.6	9.1	57.3	58.0	2.00	2.00	0.00
1,200.0	11.55	80.94	1,195.6	9.8	61.7	62.5	0.00	0.00	0.00
1,300.0	11.55	80.94	1,293.6	13.0	81.5	82.5	0.00	0.00	0.00
1,400.0	11.55	80.94	1,391.6	16.2	101.3	102.6	0.00	0.00	0.00
1,500.0	11.55	80.94	1,489.6	19.3	121.1	122.6	0.00	0.00	0.00
<b>Dolores</b>									
1,573.9	11.55	80.94	1,562.0	21.6	135.7	137.4	0.00	0.00	0.00
1,600.0	11.55	80.94	1,587.5	22.5	140.8	142.6	0.00	0.00	0.00
1,700.0	11.55	80.94	1,685.5	25.6	160.6	162.6	0.00	0.00	0.00
1,800.0	11.55	80.94	1,783.5	28.8	180.4	182.6	0.00	0.00	0.00
1,900.0	11.55	80.94	1,881.5	31.9	200.1	202.7	0.00	0.00	0.00
<b>Chinle</b>									
1,947.5	11.55	80.94	1,928.0	33.4	209.5	212.2	0.00	0.00	0.00
2,000.0	11.55	80.94	1,979.4	35.1	219.9	222.7	0.00	0.00	0.00
<b>8 5/8 Csg.</b>									
2,100.0	11.55	80.94	2,077.4	38.2	239.7	242.7	0.00	0.00	0.00
2,200.0	11.55	80.94	2,175.4	41.4	259.5	262.7	0.00	0.00	0.00
<b>Drop 2° / 100'</b>									
2,238.7	11.55	80.94	2,213.3	42.6	267.1	270.5	0.00	0.00	0.00
2,300.0	10.32	80.94	2,273.5	44.4	278.6	282.1	2.00	-2.00	0.00
<b>Lower Cutler</b>									
2,350.2	9.32	80.94	2,323.0	45.8	287.1	290.7	2.00	-2.00	0.00
2,400.0	8.32	80.94	2,372.2	47.0	294.6	298.3	2.00	-2.00	0.00
2,500.0	6.32	80.94	2,471.3	49.0	307.2	311.1	2.00	-2.00	0.00
2,600.0	4.32	80.94	2,570.9	50.4	316.3	320.3	2.00	-2.00	0.00
<b>Honaker Trail</b>									
2,616.1	4.00	80.94	2,587.0	50.6	317.5	321.5	2.00	-2.00	0.00
2,700.0	2.32	80.94	2,670.7	51.4	322.1	326.1	2.00	-2.00	0.00
2,800.0	0.32	80.94	2,770.7	51.7	324.3	328.4	2.00	-2.00	0.00
<b>HKTR MKR 5</b>									
2,801.3	0.30	80.94	2,772.0	51.7	324.4	328.5	2.00	-2.00	0.00
<b>EOD @ Vertical</b>									
2,816.2	0.00	0.00	2,786.9	51.7	324.4	328.5	2.00	-2.00	0.00
2,900.0	0.00	0.00	2,870.7	51.7	324.4	328.5	0.00	0.00	0.00
<b>TD @ 3000' MD / 2971' TVD</b>									
3,000.0	0.00	0.00	2,970.7	51.7	324.4	328.5	0.00	0.00	0.00



**HP**  
Well Planning Report



<b>Database:</b>	Compass	<b>Local Co-ordinate Reference:</b>	Well Big Indian Fed 24-31B--30-25
<b>Company:</b>	Castleton Commodities International, LLC	<b>TVD Reference:</b>	Well @ 6332.0usft
<b>Project:</b>	San Juan, Ut	<b>MD Reference:</b>	Well @ 6332.0usft
<b>Site:</b>	Sec. 24-T30S-R25E	<b>North Reference:</b>	True
<b>Well:</b>	Big Indian Fed 24-31B--30-25	<b>Survey Calculation Method:</b>	Minimum Curvature
<b>Wellbore:</b>	Wellbore #1		
<b>Design:</b>	Design #1		

Design Targets									
Target Name	Dip Angle (°)	Dip Dir. (°)	TVD (usft)	+N/-S (usft)	+E/-W (usft)	Northing (usft)	Easting (usft)	Latitude	Longitude
Big Indian Fed 24-31B-3	0.00	0.00	2,787.0	51.7	324.5	10,395,302.94	2,320,954.92	38° 9' 40.248 N	109° 7' 58.280 W
- hit/miss target									
- Shape									
- plan misses target center by 0.1usft at 2816.3usft MD (2787.0 TVD, 51.7 N, 324.4 E)									
- Point									

Casing Points				
Measured Depth (usft)	Vertical Depth (usft)	Name	Casing Diameter (")	Hole Diameter (")
2,100.0	2,077.4	8 5/8 Csg.	8-5/8	12-1/4

Formations					
Measured Depth (usft)	Vertical Depth (usft)	Name	Lithology	Dip (°)	Dip Direction (°)
832.3	832.0	Entrada		0.00	
1,573.9	1,562.0	Dolores		0.00	
1,947.5	1,928.0	Chinle		0.00	
2,350.2	2,323.0	Lower Cutler		0.00	
2,616.1	2,587.0	Honaker Trail		0.00	
2,801.3	2,772.0	HKTR MKR 5		0.00	

Plan Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates		Comment	
		+N/-S (usft)	+E/-W (usft)		
600.0	600.0	0.0	0.0	Build @ 2° / 100'	
1,177.5	1,173.6	9.1	57.3	EOB @ 11.55° Inc / 80.94° Azm	
2,238.7	2,213.3	42.6	267.1	Drop 2° / 100'	
2,816.2	2,786.9	51.7	324.4	EOD @ Vertical	
3,000.0	2,970.7	51.7	324.4	TD @ 3000' MD / 2971' TVD	

**CCI-Paradox Upstream, LLC****Big Indian 24-31B-30-25****SHL: 1,778' F/SL & 1,086' F/WL SEC 24 T 30S R 25E**

SHL: LAT 38.161046, LONG -109.133319 (NAD27)

**BHL: 1,830' F/SL & 1,411' F/WL SEC 24 T 30S R 25E**

BHL: LAT 38.161188, LONG -109.132191 (NAD27)

San Juan County, UT

Surface: Federal

Federal Mineral Lease: UTU82597

Onshore Oil & Gas Order No. 1 & No. 2**Drilling Plan**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of the subcontractors. A copy of these conditions will be furnished to the field representative to ensure compliance.

**1. Estimated Formation Tops**

Age	Formation	Fluid	MD	TVD	Subsea
Jurassic	Morrison	W	Surface	surface	6,332'
Jurassic	Entrada	W	875'	875'	5,457'
Triassic	Dolores	W	1,626'	1,613'	4,719'
Triassic	Chinle	N	2,000'	1,979'	4,353'
Permian	Lower Cutler	G	2,402'	2,374'	3,958'
Penn	Honaker Trail	G	2,664'	2,635'	3,697'
Penn	HKTR MKR 5	G	2,846'	2,817'	3,515'
	Total Depth		<b>2,966'</b>	<b>2,937'</b>	3,395'
G = Gas, O = Oil, W = Water; N = None known					

All fresh water and prospectively valuable minerals encountered during drilling will be recorded by depth and adequately protected. All indications of usable water (10,000 ppm or less TDS) shall be reported to the Moab Field Office prior to running the next string of casing or before plugging orders are requested, whichever occurs first. If noticeable water flows are detected, samples will be submitted to the BLM along with any water analyses conducted.

Note: The operator proposes to protect potable groundwater/aquifers as follows: The surface casing shoe will be set at set at 2,100' MD or at least 50' below the top of Chinle formation (1,979' TVD + 103' = 2,100'). The top 103' of Chinle back to surface will be

behind 8-5/8" 32#, J-55, ST&C surface casing and cemented to surface to ensure a good barrier between any fresh water sources.

### Directional Drilling Program

- a. The 12-1/4" surface hole is drilled from 0' to 600' MD vertically to a Kick-Off Point at 600' MD and build at the rate of 2° per 100' to an inclination of 11.55° and an azimuth of 80.94° by 1,177.5'. Maintain angle to 8-5/8" surface casing TD at 2,100' MD (50' into Chinle).
- b. 7-7/8" production hole maintains the inclination of 11.55° and an azimuth of 80.94° from under surface casing point to 2,300' MD, then starts drop at -2° build rate to 0.00° inclination and 0.00° azimuth at 2,816.2' MD and maintains vertical hole to TD at 2,966' MD (2,937 TVD). See attached Directional Drilling Plan.

## 2. Casing Program

Zone Area	Depth (MD)	Hole Size	Outer Diameter	Weight	Grade	Type
Conductor	0' – 60'	26"	20"	65#	H-40	ST&C
Surface	0' – 2,100'	12-1/4"	8-5/8"	32#	J-55	ST&C New
Production	0' – 2,966'	7-7/8"	4-1/2"	11.6#	N-80	LT&C New

Description	Interval (MD)		Weight (ppf)	Grade	Coup	Pore Press @ Shoe	MW @ Shoe	Frac Grad @ Shoe	Safety Factors		
	Top	Bottom							Burst	Collapse	Tension
Conductor	0'	60'	65	H-40	STC	--	--	--	1,640	670	736,000
20"									--	--	--
Surface	0'	2,100'	32	J-55	STC	7	8.4	9	3,930	2,530	503,000
8.625"									5.92	3.58	7.49
Production	0'	2,966'	11.6	N-80	LTC	12	9.4	9	6,350	7,780	267,000
4.5"									4.96	8.19	9.43

Casing Head – 11" x 8-5/8" SOW 5M

Tubing Head – 11" x 4-1/16" 10M

- a. The BLM in Moab, Utah shall be notified at least 24 hours prior to the running and cementing of all casing strings, in order to have a BLM representative on location while running and cementing all casing strings.
- b. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all unusable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. The casing setting depth

06/07/2015

shall be calculated to position the casing seat opposite a competent formation, which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including presence/absence of hydrocarbons, fracture gradients, usable water zones, formation pressures, lost circulation zones, other minerals, or other unusual characteristics. All indications of usable water shall be reported.

- c. Casing design shall assume a formation pressure gradient of 0.1 psi per foot.
- d. Casing design shall assume fracture gradients from 0.85 to 0.90 psi per foot.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500-psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized office prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Surface casing shall have centralizers on the bottom 3 joints of casing (a minimum of one centralizer per joint starting with the shoe joint).
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc., shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry. A corrosion/bactericide inhibitor will be placed in the mud system above the cement top to surface.
- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1,500 psi, whichever is greater, but not to exceed 70% of the minimum internal yield. If pressure declines more than 10% in 30 minutes, corrective actions shall be taken.
- l. On exploratory wells such as this, and on well approved for a 3M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to the minimum mud weight equivalent anticipated to control the formation pressure to the next casing depth at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- m. The proposed casing integrity design parameters are as follows:

Size Grade	Weight	Burst (psi)	Collapse (psi)	Body Yield (lbs)	Joint Strength (lbs)
8-5/8" J-55	32#	3,930	2,530	503,000	372,000
4-1/2" N-80	11.6#	6,350	7,780	267,000	223,000

- n. Casing design subject to revision based on geologic conditions encountered.

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### 3. BOP Specification

Pressure control equipment rating will be 3,000 psi. This equipment will be nipped up on the surface casing and tested to 3000 psi high prior to drilling out. The choke manifold equipment, upper and lower kelly cock, and floor safety valves will be tested to 3000 psi high. The annular preventer will be tested to 1500psi high. Surface casing will be tested to 1500psi prior to drill out. BOP equipment will be tested after any repairs to equipment and at 30 day intervals. The pipe rams and blind rams shall be activated each trip. Weekly BOP drills will be held by each crew.

#### Pressure Control

See attached blowout preventer diagram, page 10.

#### BOP Requirements

Bureau of Land Management's minimum specification for pressure control equipment are as follows:

- a. Ram Type 11" Hydraulic double ram with annular, 3,000 psi wp.
- b. Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70% of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10% in 30 minutes occurs, the test shall be considered to have failed. Valve on casing head below test plug shall be open during test of BOP stack.
- c. Annular type preventers (if used) shall be tested to 70% of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.
- d. As a minimum, the above test shall be performed:
  - i. when initially installed
  - ii. whenever any seal subject to test pressure is broken
  - iii. following related repairs and
  - iv. at 30 day intervals
- e. Valves shall be tested from working pressure side during BOPE tests with all down- stream valves open.
- f. When testing the kill line valve(s) shall be held open or the ball removed.
- g. Annular preventers (if used) shall be functionally operated at least weekly.
- h. Pipe and blind rams shall be activated each trip, however, this function need not be performed more than once a day.
- i. A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests. Pressure tests shall apply to all related well control equipment.

BOP systems shall be consistent with API RP53. Pressure tests will be conducted before drilling out from under casing strings which have been set and cemented in place. Blowout preventer controls will be installed prior to drilling the surface casing plug and will remain in use until the well is

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completed or abandoned. Preventers will be inspected and operated at least daily to ensure good mechanical working order, and this inspection will be recorded on the daily drilling report. Preventers will be pressure tested before drilling casing cement plugs.

The BLM in Moab, Utah shall be notified, at least 24 hours prior to initiating the pressure test, in order to have a BLM representative on location during pressure testing.

- a. The size and rating of the BOP stack is shown on the attached diagram.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s) to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.

**Statement of Accumulator System and Location of Hydraulic Controls**

The drilling rig has not been selected for this well. Selection will take place after approval of this application is granted. Manual and/or hydraulic controls will be in compliance with the OSO #2 for a 3,000 psi system.

A remote accumulator will be used. Pressures, capabilities, location of remote hydraulic and manual controls will be identified at the time of the BLM supervised BOP test.

During drilling operations, CCI Paradox Upstream LLC follows the API Drillers Method for kick control in the event of a gas kick.

**4. Cementing Program**

Casing String / Interval	Cement Top	Cmt. Bottom Depth / Fill	Slurry Description
<b>Conductor</b>			<b>Type and Amount</b>
0' – 60' MD	0'	60'	Redimix to surface
<b>Surface Casing</b>			<b>Type and Amount*</b>
0' – 2,100' MD	0'	2,100' Lead: 0' – 1,200' Tail: 1,200' – 2,100'	<b>Lead:</b> 1200 ft x .4127 cuft/ft x 2 (100% excess) = 990 cuft / 2.45 cuft/sk(yield) = <b>405 sx Premium Lite FM cement</b> with 1% bwoc Calcium Chloride + 8% bwoc Bentonite + 0.5% bwoc Sodium Metasilicate + fresh water <b>12.3 ppg</b>  <b>Tail:</b> 900 ft x .4127 cuft/ft x 2 (100% excess) = 743 cuft / 2.18 cuft/sk(yield) = <b>340 sacks of Type III cement</b> with 1% bwoc Calcium Choride + fresh water <b>12.8 ppg</b>

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			<b>Lead:</b> 176 bbls, slurry weight <b>12.3 ppg</b> , slurry yield 2.45 cuft/sk <b>Tail:</b> 132 bbls, slurry weight <b>12.8 ppg</b> , slurry yield 2.18 cuft/sk
<b>Production Casing</b>			<b>Type and Amount**</b>
0' – 2,966' MD	0'	2,966' MD  Lead: 0' – 2,100' Tail: 2,100' – 2,966'	<b>Lead:</b> 2,100 ft x .2318 cuft/ft x 1.05 (5% excess) = 510 cuft / 2.63 cuft/sk(yield) = <b>195 sacks of Type III cement</b> with 0.3% bwoc HR-5 (retarder) + 0.25 lbs/sk Cellophane Flakes + 5 lbs/sk Gilsonite (asphaltene) + 3% bwoc Cal-Seal (accelerator) + fresh water <b>11.7 ppg</b> <b>Tail:</b> 866 ft x .2278 cuft/ft x 1.3 (30% excess) = 256 cuft / 1.47 cuft/sk(yield) = <b>175 sacks of Type III cement</b> with 0.25 lbs/sk Cellophane Flake + 5 lbs/sk Gilsonite (asphaltene) + 0.3 bwoc HalAd 344 (fluid loss additive) + fresh water <b>14.2 ppg</b>  <b>Lead:</b> 90 bbls, slurry weight <b>11.7 ppg</b> , slurry yield 2.63 cuft/sk <b>Tail:</b> 46 bbls, slurry weight <b>14.2 ppg</b> , slurry yield 1.47 cuft/sk

\* Surface cement volume calculated with 100% excess.

\*\* Production cement volume calculated with 30% excess.

#### Centralizers

After reaching each casing point on any string and after logging run has been completed TIH to TD or may already be at TD at casing point, perform flow check, circulate bottoms up, pump sweep, circulate at least 2x surface to surface volume while conditioning hole for casing, reduced mud viscosity to 36-40 sec/qt to minimize risk of cement channeling. Slug pipe, SLM out of hole. Check all casing equipment and baker lock on the float shoe and float collar and one joint above float collar. Place one centralizer (bow spring type) 10' above shoe and the next three collars; then centralizers every third joint back to surface on all casing strings.

When pumping slurry maintain 5 BPM rate and slow down the last 10 bbls before bumping the plug on the float collar. Bump plug to 500 to 1000 psi above final pump pressure. Slowly release pressure to 100 psi, ensure floats are holding, double check if in doubt.

- a. **The BLM office in Moab, UT will be notified, with sufficient lead time, in order to have a BLM representative on location while running all casing strings and cementing.**

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- b. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC times shall be recorded in the driller's log.

## 5. Drilling Fluids

The proposed circulating mediums to be employed in drilling are as follows:

Interval (TVD)	Mud Type	Mud Weight	Funnel Viscosity (cp)	Yield Point (lb/100ft <sup>2</sup> )	Gel Strength (10 sec/10 min)	Total Hardness (Mg/l)	API Fluid Loss (ml/30 min)	pH	Chlorides (mg/l)
0' – 2,100'	Spud Mud Gel Sweeps	8.0 – 8.4 ppg	35-50	5-15	4-15	<100	No Control	9.0-10.0	<5000
2,100' – 2,966'	LSND	8.4 – 9.4 ppg	35-45	10-12	7-15	<60	6-8	7.5-8.5	<5000

Additives and contingency mud additives that may be used during drilling:

- a. Surface Potential Problems: Hole cleaning, lost circulation, stuck pipe, sloughing and water flows.  
Additives: spud mud, gel, caustic soda (pH control), poly plus (bit/hole cleaning), Asphasol Supreme (wellbore stability), barite, Poly Pac (reduce fluid loss), LCM (fibrous and granular).
- b. Production Potential Problems: Hole cleaning, lost circulation, stuck pipe, sloughing and reactive clays/shales.  
Additives: Sodium Bicarb and citric acid (reduce calcium / hardness), poly plus (bit/hole cleaning), gel (filter cake and fluid loss), salt gel (hole cleaning, YP), Asphasol Supreme (wellbore stability), barite, Poly Pac (reduce fluid loss), LCM (fibrous and granular), bactericide.

Mud monitoring equipment to be used is as follows:

- a. Periodic checks of the mud systems will be made each tour. The mud level will be checked visually.
- b. The mud system will be run utilizing a closed loop system. There will be sufficient mud on location to ensure well control. Approximately 450 bbls of mud will be held in reserve.
- c. A mud test shall be performed every 24 hours after mudding to determine, as applicable, density, viscosity, gel strength, static filtration loss and Ph.
- d. Hazardous substances specifically listed by the EPA as hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

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**6. Auxiliary Equipment**

Auxiliary equipment to be used is as follows:

- a. PVT equipment measuring mud volume, pump strokes, and percent return flow to be installed after setting surface casing and installing BOPE. This system includes alarms and remote terminals located on the rig floor.
- b. Mud logger with gas monitor from bottom of surface casing to TD.
- c. Choke manifold with remote control choke.
- d. Full opening floor valve with drill pipe thread.
- e. Upper and lower Kelly cock.
- f. PVT monitor on pit level, audio and visual below surface casing.
- g. Gas Buster, centrifuge and closed loop mud system will be utilized in drilling this well. Cuttings will be stored in surface containers and hauled and disposed at a legal disposal site.

**7. Evaluation Program**

The anticipated type and amount of testing, logging and coring are as follows:

<b>Casing String</b>	<b>Log Type</b>
TD to Surface Casing:	Quad Combo/DGR/HDIL/ZDL-CN/DAL/TTRM / CBL- Prod.
TD Surface Casing to Surface	GR CBL
Coring	None
Testing	FMT – 10 planned Lower Cutler & Upper HT ~2,402 MD - ~2,800 MD
Mud Logging	30' Samples: 1600' to the top of Cutler 10' Samples: Lower Cutler to TD 1 Set Dried

**8. Downhole Conditions**

<b>Pressures:</b>	No abnormal conditions are anticipated. Anticipated BHP is $\pm$ 1,292 psi or gradient: 0.44 psi/ft
<b>Temperatures:</b>	Anticipated bottomhole temperature is 120 degrees Fahrenheit.
<b>H<sub>2</sub>S:</b>	None anticipated
<b>Estimated BHP:</b>	$\pm$ 1,292 psi
<b>Lost Circulation Zones:</b>	Surface to Cutler
<b>Shallow Water Flows:</b>	Surface to Dolores
<b>Geopressed Faults:</b>	None anticipated
<b>Pressure Depleted Zones:</b>	None anticipated

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No other downhole geohazards outside of the above table are anticipated.

## 9. Anticipated Agenda

Operations are expected to commence soon after a permit is issued, subject to rig availability. Drilling operations are expected to last about 14 days. If data indicate that this is a commercial well, then production casing will be run. Surface cased hole CBL will be run with the open hole logs in the drilling phase and the Production casing CBL will be during the completion phase of the well. The stimulation to be performed will consist of a small acid and/or water frac in the Cutler zones. Quantities and type of frac fluid used will be determined by the amount of pay section shown on the open hole logs. The operations are anticipated to last 14 days. Completion Approval for further action will be requested on a Sundry Notice. CCI Paradox Upstream LLC anticipates spudding the well in the fall of 2015.

**The BLM – Moab Field Office – Moab, CO shall be notified at least 24 hours prior to:**

- **Spudding the well**
- **Running casing strings and cementing**
- **BOP test / casing pressured tests**

Within 30 days of completion of the well as a dry hole or producer, a copy of all logs, well test data, geologic summaries, sample descriptions and all other surveys or data obtained and compiled during the drilling, workover and/or completions operations will be filed with a Completion Report (Form 3160-4) via the WIS portal, with casing/cementing reports and other required reports as attachments.

The BLM – Moab Field Office – Moab, CO office shall be notified within 5 business days of production startup if either of the following two occur:

- The well is placed on production
- The well resumes production after being off production for more than 90 days

The location pad will be sufficient size to accommodate all completion activities and equipment. A string of 2-3/8", 4.7#, N-80, EUE 8rnd will be run and production tubing. A Sundry Notice (SN) will be submitted with a revised completion program is warranted.

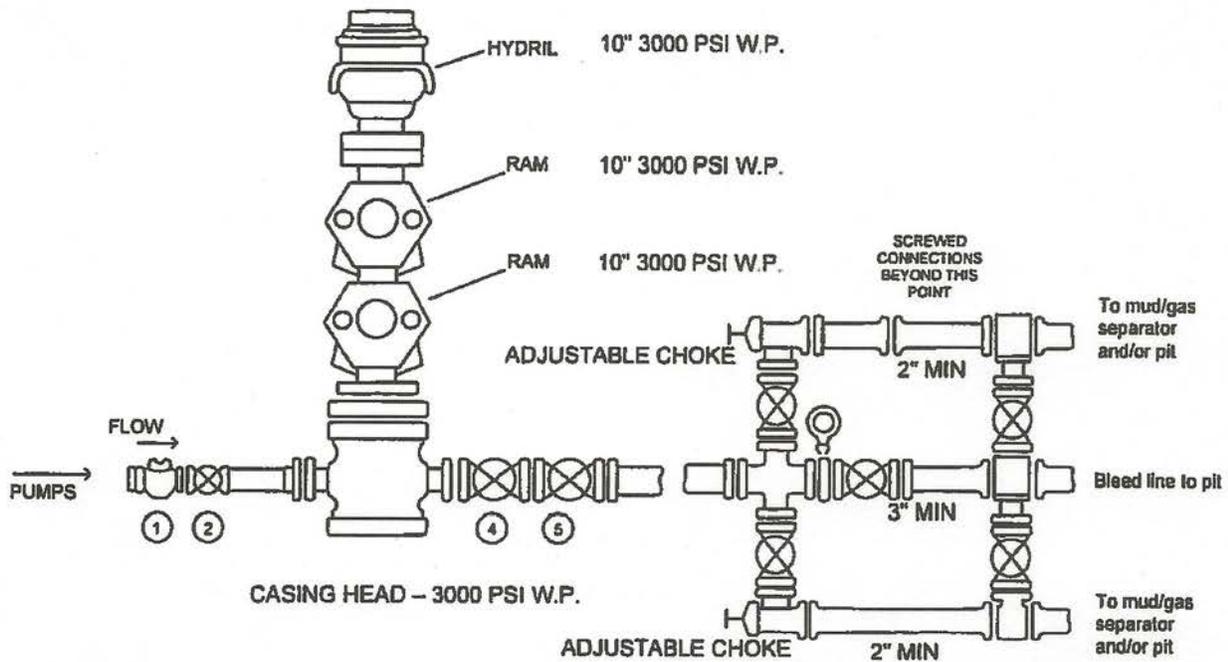
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# MINIMUM BOP Requirements

3000 PSI W.P.

FILL LINE ABOVE THE UPPERMOST PREVENTER



**KILL LINE**

- Valve #1 - Flanged check valve  
Full working pressure of BOP
- Valve #2 - Flanged, minimum 2" bore  
Full working pressure of BOP

**CHOKE LINE**

- Valves #4 & 5 - Flanged minimum 3" bore  
Full working pressure of BOP
- (Note: An HCR can be used instead of Valve # 5)

**GENERAL RULES AND RECOMMENDATIONS**

All lines to manifold are to be at right angles (90 deg.). No 45 deg. angles are to be used.  
Blind flanges are to be used for blanking.  
All studs and nuts are to be installed on all flanges.



Castleton Commodities International LLC  
811 Main Street, Suite 3500  
Houston, TX 77002 - 6225

T 281 378 -1100  
F 281 378 -1250

August 18, 2015

Ms. Diana Mason  
Utah Department of Natural Resources  
Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
Salt Lake City, UT 84116

RE: Rule R649-3-11 Directional Drilling R649-3-11  
Big Indian 24-31B-30-25: 1778' FSL & 1086' FWL (Surface Hole) NWSW  
1830' FSL & 1411' FWL (Bottom Hole) NESW  
Sec. 24, T30S, R25E, S.L.P.M.  
San Juan County, Utah

Dear Ms. Mason:

Pursuant to the filing of CCI Paradox LLC's Application for Permit to Drill regarding the above referenced well on March 3<sup>rd</sup>, 2015, we are hereby submitting this letter in accordance with the Oil & Gas Conservation Rule R649-3-11 pertaining to the Exception to Location and Siting of wells.

- CCI Paradox Upstream LLC is permitting this well as a directional well in order to minimize surface disturbance. Locating the well as the surface location and drilling directionally from this location, CCI Paradox Upstream LLC will be able to utilize the existing road and pipelines in the area.
- Furthermore, CCI Paradox Upstream LLC hereby certifies that it is the sole working interest owner within 460 feet of the entire directional wellbore.

Therefore, based on the above stated information, CCI Paradox Upstream LLC requests the permit be granted pursuant to R649-3-11. Should you have any questions or comments, please do not hesitate to contact the undersigned at (281) 714-2987 or [Anna.Hudson@cci.com](mailto:Anna.Hudson@cci.com).

Sincerely,

A handwritten signature in blue ink, appearing to read "Anna Hudson", is written over a blue horizontal line.

Anna Hudson  
Landman



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

June 28, 2016

CCI Paradox Upstream, LLC  
600 17th Street, Suite 1900S  
Denver, CO 80202

Re: APD Rescinded – Big Indian 24-31B-30-25, Sec. 24, T. 30S, R. 25E,  
San Juan County, Utah API No. 43-037-50072

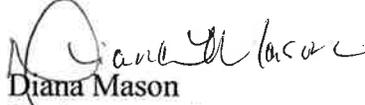
Ladies and Gentlemen:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on April 28, 2015. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 28, 2016.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

  
Diana Mason  
Environmental Scientist

cc: Well File  
Bureau of Land Management, Monticello

