FORM 15 Rev 6/99

# State of Colorado
# Oil and Gas Conservation Commission

1120 Lincoln Street, Suite 801, Denver, Colorado 80203 (303)894-2100 Fax:(303)894-2109

FOR OGCC USE ONLY

# EARTHEN PIT REPORT/PERMIT

This form is to be used for both reporting and permitting pits. Rule 903 describes when a Permit with prior approval, or a Report within 30 days, is required for pits. Submit required attachments and forms.

**Complete the Attachment Checklist**

| | Oper | OGCC |
|---|---|---|
| Detailed Site Plan | X | |
| Topo Map w/ Pit Location | X | |
| Water Analysis (Form 25) | NA | |
| Source Wells (Form 26) | NA | |
| Pit Design/Plan & Cross Sect | X | |
| Design Calculations | X | |
| Sensitive Area Determ. | X | |
| Mud Program | NA | |
| Form 2A | NA | |

## FORM SUBMITTED FOR:

☐ **Pit Report** ☒ **Pit Permit**

OGCC Operator Number: 96850

Name of Operator: Williams Production RMT

Address: 1058 County Rd 215

City: Parachute State: CO Zip: 81635

Contact Name and Telephone:
Karolina Blaney
No: 970 683-2295
Fax: (970) 285-9573

API Number (of associated well): _____ OGCC Facility ID (of other associated facility): _____

Pit Location (QtrQtr, Sec, Twp, Rng, Meridian): NE NW T6S R95W, Section 28 6TH PM

Latitude: 39.499583 Longitude: -108.005167 County: Garfield

Pit Use: ☐ Production ☐ Drilling (Attach mud program) ☒ Special Purpose (Describe Use): Flare Pit

Pit Type: ☐ Lined ☒ Unlined Surface Discharge Permit: ☐ Yes ☒ No

Offsite disposal of pit contents: ☐ Injection ☐ Commercial Pit/Facility Name: W 43-28 Pit/Facility No: _____

**Attach Form 26 to identify Source Wells and Form 25 to provide Produced Water Analysis results.**

## Existing Site Conditions

Is the location in a "Sensitive Area?" ☒ Yes ☐ No **Attach data used for determination.**

Distance (in feet) to nearest surface water: 119 ground water: 130 water wells: 3671

**LAND USE (or attach copy of Form 2A if previously submitted for associated well) Select one which best describes land use:**

Crop Land: ☐ Irrigated ☐ Dry Land ☐ Improved Pasture ☐ Hay Meadow ☐ CRP

Non-Crop Land: ☒ Rangeland ☐ Timber ☐ Recreational ☐ Other (describe): _____

Subdivided: ☐ Industrial ☐ Commercial ☐ Residential

**SOILS (or attach copy of Form 2A if previously submitted for associated well)**

Soil map units form USNRCS survey: Sheet No: NA Soil Complex/Series No: 62

Soils Series Name: ROCK OUTCROP Horizon thickness (in inches): A: 0-60 ; B: ; C:

Soils Series Name: TORRIORTHENTS Horizon thickness (in inches): A: 0-4 ; B: 4-30 ; C: 30-34

**Attach detailed site plan and topo map with pit location.**

## Pit Design and Construction

Size of pit (feet): Length: 10 Width: 10 Depth: 5

Calculated pit volume (bbls): 50 Daily inflow rate (bbls/day): NA

Daily disposal rates (attach calculations): Evaporation: NA bbls/day Percolation: NA bbls/day

Type of liner material: NA Thickness: NA

**Attach description of proposed design and construction (include sketches and calculations).**

Method of treatment of produced water prior to discharge into pit (separator, heater treater, other): NA

Is pit fenced? ☐ Yes ☒ No Is pit netted? ☐ Yes ☒ No

I hereby certify that the statements made in this form are, to the best of my knowledge, true, correct, and complete.

Print Name: Karolina Blaney Signed: Karolina Blaney

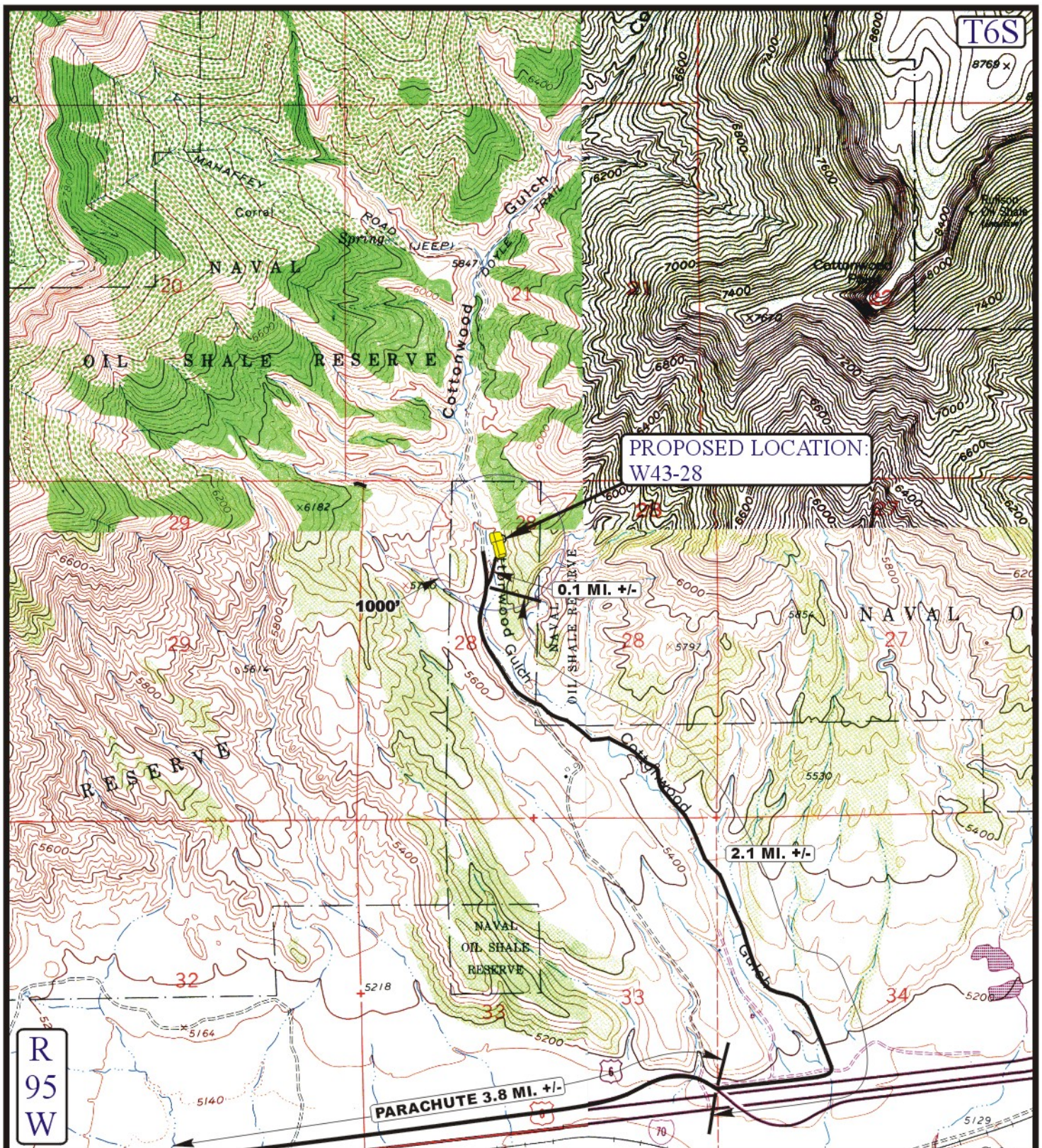
Title: Environmental Specialist Date: 8/9/10

OGCC Approved: Chris Canfield, P.G. Title: Digitally signed by Chris Canfield, P.G. DN: cn=Chris Canfield, P.G., o=COGCC, ou=EPS - NW Region, email=chris.canfield@state.co.us, c=US Date: 2010.09.10 12:48:53 -06'00' Date: _____

**CONDITIONS OF APPROVAL, IF ANY:**

**FACILITY NUMBER:**

Topo Map with Pit Location




LEGEND:

EXISTING ROAD

N

**WILLIAMS PRODUCTION RMT COMPANY**

**W43-28**
**SECTION 28, T6S, R95W, 6th P.M.**

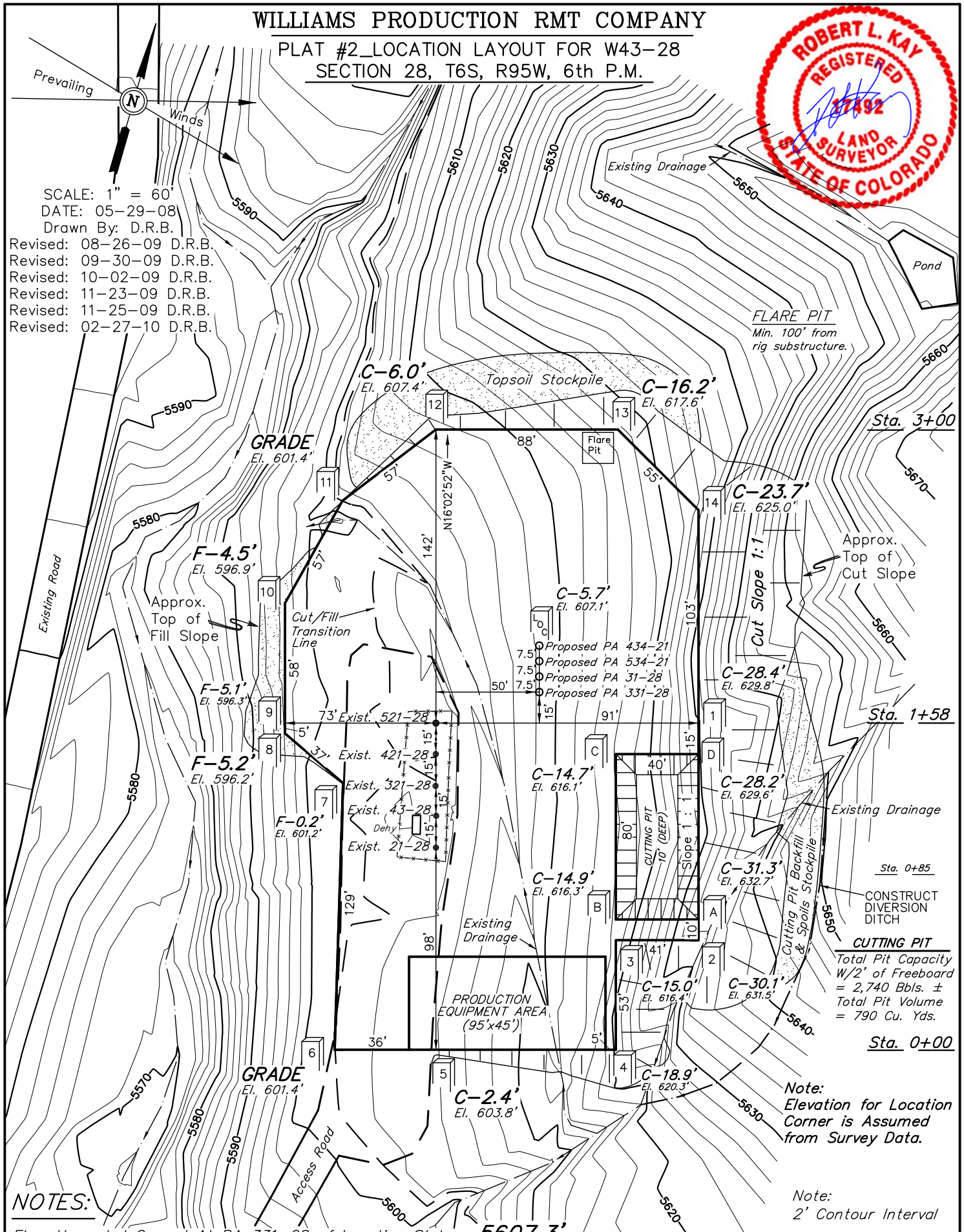

Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
(435) 789-1017 * FAX (435) 789-1813


| TOPOGRAPHIC MAP | 09 MONTH | 03 DAY | 09 YEAR | 5 PLAT |
|---|---|---|---|---|
| SCALE: 1" = 2000' | DRAWN BY: Z.L. | REVISED: 11-23-09 | | |

# Detailed Site Plan

# WILLIAMS PRODUCTION RMT COMPANY

## PLAT #2_LOCATION LAYOUT FOR W43-28
## SECTION 28, T6S, R95W, 6th P.M.




NOTES:

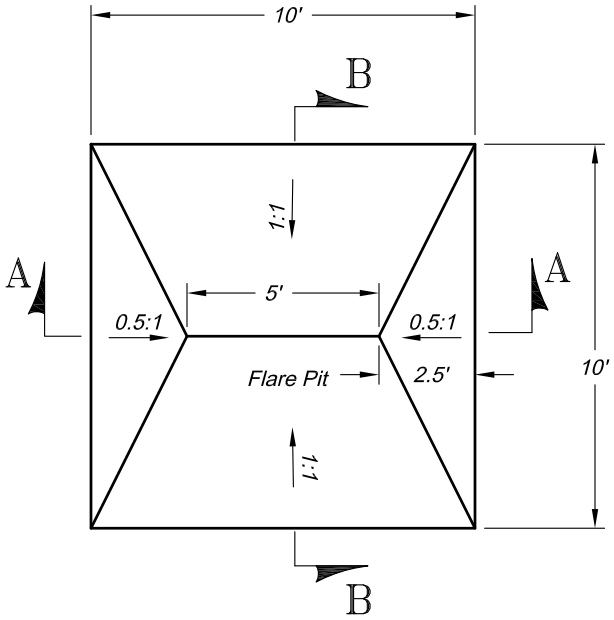
Elev. Ungraded Ground At PA 331-28 of Location Stake = 5607.3'

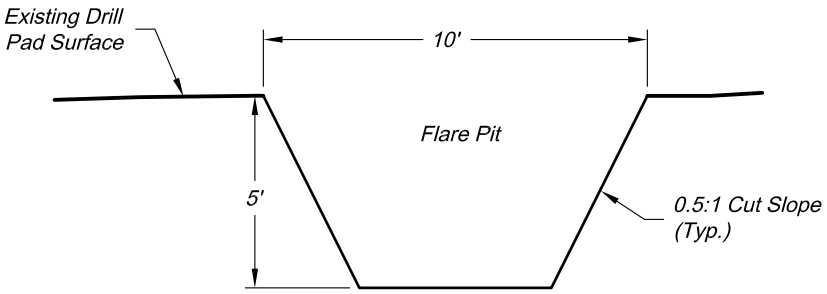
FINISHED GRADE ELEV. AT PA 331-28 of Location Stake = 5601.4'

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

# Pit Design/Plan and Cross Section

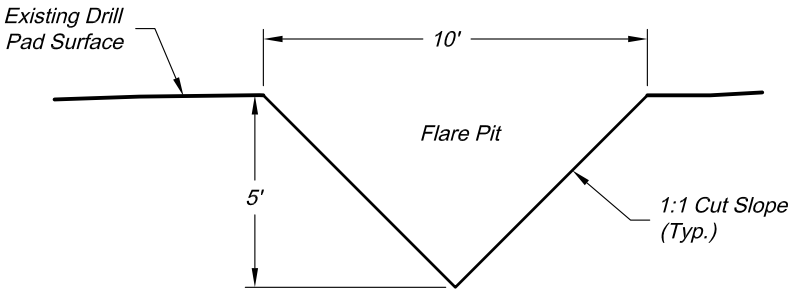
# Design Calculations




## Section A

Scale: 1" = 5'




## Section B

Scale: 1" = 5'

Total Volume ~ 50bbls

Revised date:8/11/09

136 East Third Street
Rifle, Colorado 81650
Ph. (970) 625-1330
Fax (970) 625-2773
BOOKCLIFF Survey Services, Inc.

| | |
|---|---|
| SCALE: | 1" = 5' |
| DATE: | 5/15/09 |
| SHEET: | 1 of 1 |
| PROJECT: | Williams |
| DFT: | cws |

**Construction Plan Prepared for:**

Williams Production, RMT

*10' x 10' FLARE PIT*

*WILLIAMS STANDARD DETAIL*

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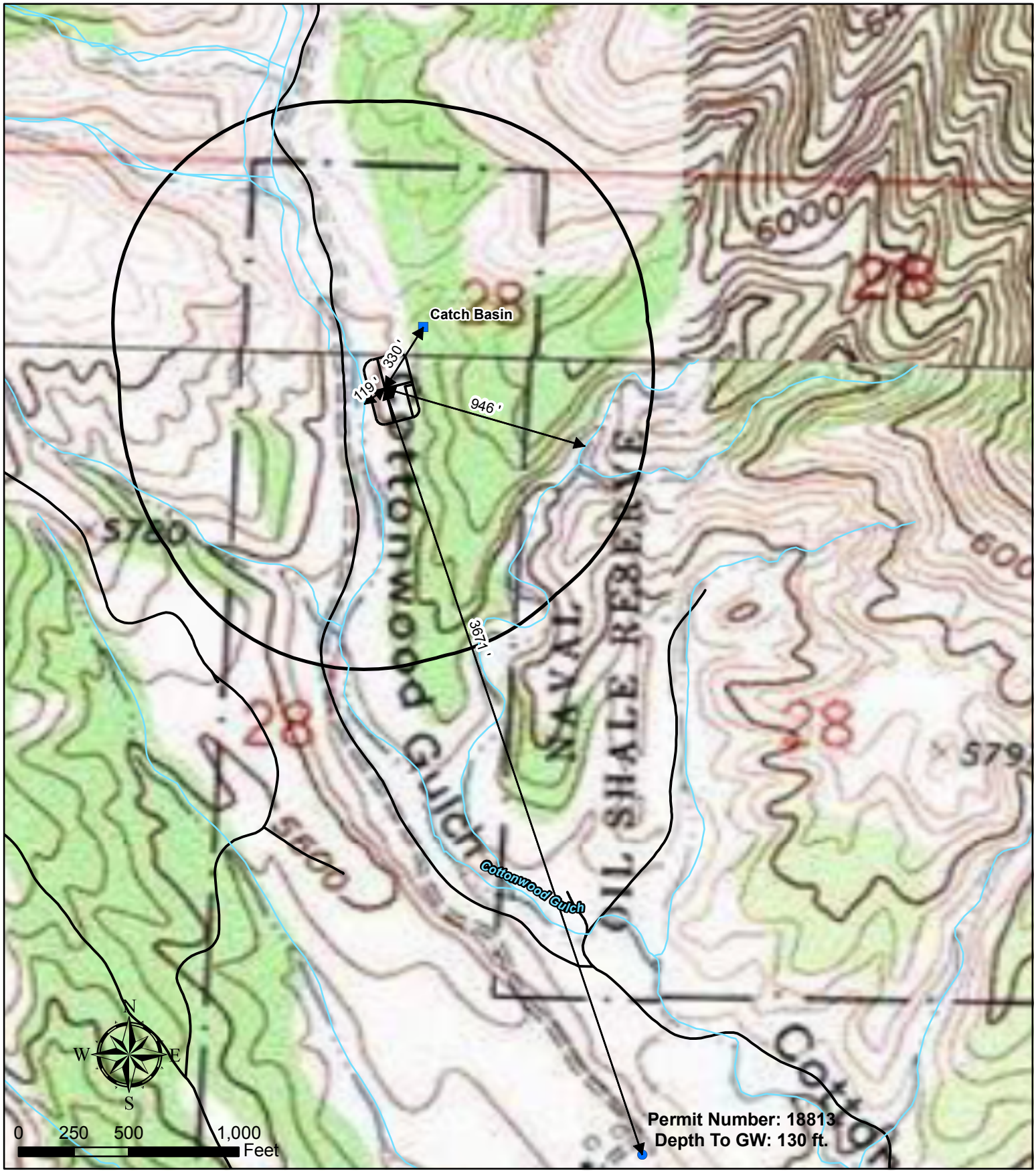
# Sensitive Area Determination




## Legend

- Water Well
- Stream
- Pad
- Existing Road
- 1000' Buffer

Williams Production RMT

Plat 5C

W 43-28 Hydrology Map
T6S R 95W Section 28

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# Sensitive Area Determination Checklist

| Williams Production RMT Company – Valley | | | |
|---|---|---|---|
| **Person(s) conducting inspection** | | Mark E. Mumby | 10/2/2009 |
| | | | |
| **Site Information** | | | |
| Location: | W 43-28 well pad | | Time: 12:15 |
| Site Activity: | Producing well pad | | |
| Personnel on-site: | None | | |
| **Environmental Conditions** | Clear, cool, calm winds, dry soil conditions | | |
| | | | |
| Temperature (°F) | ~65 | | |

1. Will the pit of the proposed facility contain hydrocarbons and chlorides or other E&P wastes?
   X Yes ☐ No (*If no, this form does not need to be completed*.)
   If yes, list pit type(s): Drilling, Flare pits

## SURFACE WATER

1. Are there any surface water features or SWSAs adjacent to or within the ¼ mile buffer zone?
   X Yes ☐ No (*If no, move to Groundwater section of this checklist.*)
   If yes, list type of surface water feature(s), i.e. seeps, springs, wetlands:
   Cottonwood Gulch-perennial stream, two unnamed ephemeral drainages, and numerous small drainage features.

   If yes, describe location relative to facility:
   Cottonwood Gulch is adjacent to the west edge of the existing pad and planned new pad. One of the unnamed ephemeral drainages is north of the existing and planned pad approximately 130 to 150 feet. The other unnamed ephemeral drainage is adjacent to the southeast corner of the pad. The numerous small unnamed drainage features are on the hillside adjacent to the east side of the existing pad.

2. Could a potential release from the proposed facility reach surface water features?
   X Yes ☐ No (*If no, move to Groundwater section of this checklist.*)
   If yes, describe the pathway a release from facility would likely follow to determine if the potential to impact surface water is high or low.
   The pathway with the greatest potential to reach surface water would be off the west side of the pad which is adjacent to Cottonwood Gulch. Depending on how the pad is constructed and the size, a release from the facility could also impact the two unnamed

ephemeral drainages to the north and south of the existing and planned pad, both of which would flow directly into Cottonwood Gulch.

3. Is the potential to impact surface water from a facility release high or low?
   X High☐ Low

## GROUNDWATER

1. Is the site of the proposed facility underlain by an unconfined aquifer?
   X Yes ☐ No (*If no, this section does not need to be completed*.)

2. Is the hydraulic conductivity of the underlying soil or bedrock $\geq 1.0 \times 10^{-7}$ cm/sec?
   ☐ Yes (*If yes, this section does not need to be completed*.) X No

3. Is the proposed facility located within 1/8 mile of a domestic water well or 1/4 mile of a public water supply well?
   ☐ Yes X No (*If no, this section does not need to be completed*.)

4. Is the proposed facility located within a 100 year floodplain?
   ☐ Yes (*Sensitive Area*) X No (*If no, proceed to question #5*.)

5. Is the depth to groundwater known?
   ☐ Yes X No (*If no, follow instructions provided in 5(b) of this section.*)

   (a) If yes, could a potential release from the proposed facility reach groundwater?
   ☐ Yes ☐ No (*If no, this section does not need to be completed*.)
   If yes, model the hydro geologic conditions to determine if the potential to impact groundwater is high or low.

   (b) If no:
   (i) Drill a soil boring to determine depth to groundwater.
   (ii) Evaluate subsurface data to determine if confining layers exist.
   (iii) Model hydro geologic conditions to determine if the potential to impact groundwater is high or low.

6. Is the potential to impact ground water from a facility release high or low?
   ☐ High X Low

**Additional Comments:**

Based on surface observations of the areas west of the existing pad; there is a potential that shallow groundwater is present in the immediate vicinity of Cottonwood Gulch. This is based on the vegetation present i.e. cottonwood trees and tamarisk. However it appears that when the new pad is constructed, a vast majority of it will be built into solid bedrock and the potential for any migration of fluids in the bedrock would be low but possible if fractures are present.

The main concern is the potential for a release from the facility to impact surface water due to the close proximity of Cottonwood Gulch and the unnamed ephemeral drainages. There is a diversion trench constructed on the east side of the pad to keep surface water runoff from the

hillside from impacting the pad. This should be left in place if at all possible. Based on the conditions present at this location it should be designated as being in a sensitive area.

Inspector(s) Signature(s): _____ Date: 10/2/2009

_____ Date: _____