

1985 ½ SOUTH BROADWAY GRAND JUNCTION, CO 81507-9649 (970) 254-1224 FAX (970) 242-8438

email: gjdaub@daubandassociates.com www.daubandassociates.com

August 11, 2015

Mr. Kent Walter Bureau of Land Management 220 East Market Street Meeker, CO 81641

Re: Simple Oil LLC, Lease COC74299 – APD Documents for OSR-1 Oil Shale RD&D Well

Mr. Walter:

Simple Oil LLC, previously known as Natural Soda Holdings, Inc., plans to drill an Oil Shale RD&D well (OSR-1) in 2016. The OSR-1 well will be located approximately 600 feet southwest of the existing DS-6 ground water monitor well. The OSR-1 well location has been shifted slightly south of the initial location proposed in the 2013 Plan of Development. This new location will center the OSR-1 well and alternate well locations between Natural Soda LLC's future nahcolite solution mining well paths and will be located underneath the intervening pillars. The OSR well pad will be positioned and built such that in the event of mechanical difficulties with OSR-1, or if there is a determination to extend the research project, an offset additional or replacement OSR well or wells may be drilled.

## Please find attached:

- Completed 3160-3 form for OSR-1
- General Location Map and Utility Map
- Proposed OSR-1 Well Construction Schematics
- Proposed OSR-1 Well Completion Diagram

Should you have any questions or comments, please contact me at (970) 254-1224 (o) or (970) 216-1010 (c), or Bob Warneke at (970) 355-4590.

Regards,

Gerald J. Daub, PG, CPG

President

Daub & Associates, Inc.

Cc: Bob Warneke Projects Director Simple Oil LLC

> Travis Marshall Colorado Division of Reclamation Mining and Safety

File

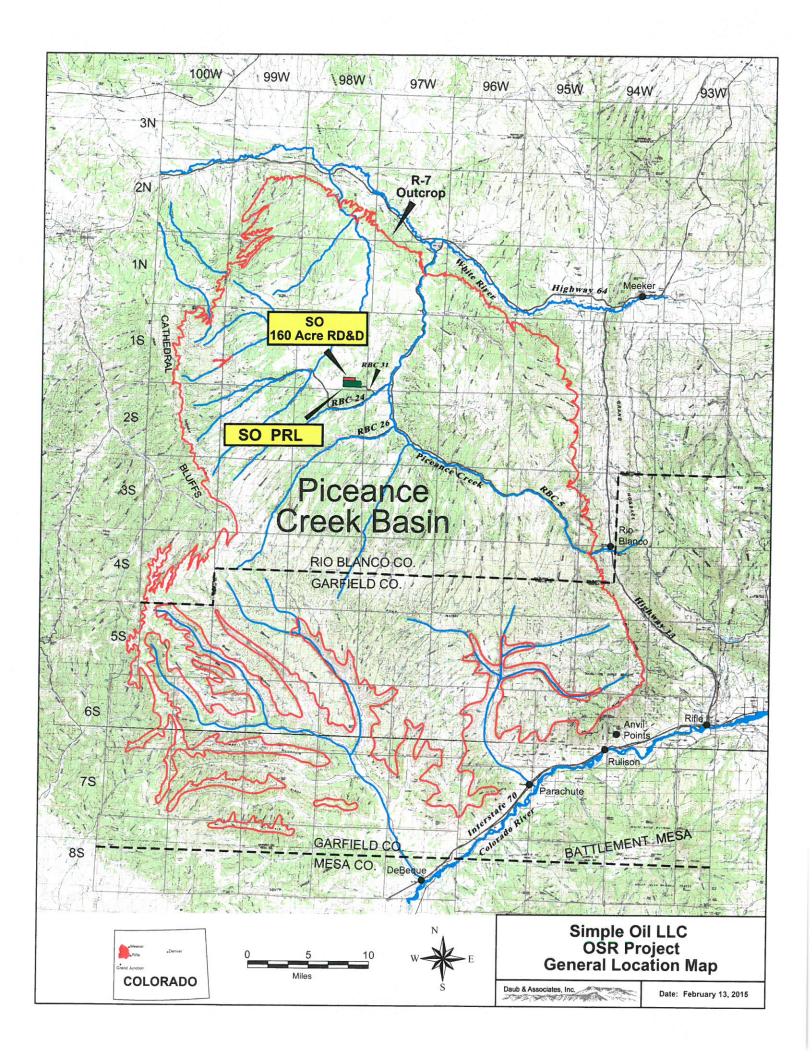
FORM APPROVED Form 3160-3 OMB No. 1004-0137 Expires July 31, 2010 (August 2007) UNITED STATES 5. Lease Serial No. DEPARTMENT OF THE INTERIOR COC74299 BUREAU OF LAND MANAGEMENT If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER N/A 7. If Unit or CA Agreement, Name and No. **✓** DRILL REENTER la. Type of work: Simple Oil LLC 8. Lease Name and Well No. lb. Type of Well: Oil Well Gas Well / Other Single Zone Multiple Zone OSR-1 Name of Operator Simple Oil LLC 9. API Well No. 3b. Phone No. (include area code) 3a. Address 10. Field and Pool, or Exploratory 3200 Rio Blanco County Road 31 (970) 878-3674 Rifle, CO 81650 Oil Shale RD&D Well Location of Well (Report location clearly and in accordance with any State requirements.\*) 11. Sec., T. R. M. or Blk. and Survey or Area At surface Latitude 39.925876403' N, Longitude 108.364571952' W (NAD 83) Section 35, T1S, R98W, 6th P.M. At proposed prod. zone Same 12. County or Parish 13. State 14. Distance in miles and direction from nearest town or post office\* ~40 miles southwest of Meeker, Colorado Rio Blanco CO Distance from proposed\* 16. No. of acres in lease 17. Spacing Unit dedicated to this well location to nearest property or lease line, ft. 160 (Also to nearest drig, unit line, if any) 20. BLM/BIA Bond No. on file 18. Distance from proposed location\* 19. Proposed Depth to nearest well, drilling, completed, applied for, on this lease, ft. ~2900' MD &TVD Elevations (Show whether DF, KDB, RT, GL, etc.) 22. Approximate date work will start\* 23. Estimated duration 6705 GL 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No.1, must be attached to this form: 1. Well plat certified by a registered surveyor. 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). 2. A Drilling Plan. 3. A Surface Use Plan (if the location is on National Forest System Lands, the 5. Operator certification SUPO must be filed with the appropriate Forest Service Office). Such other site specific information and/or plans as may be required by the

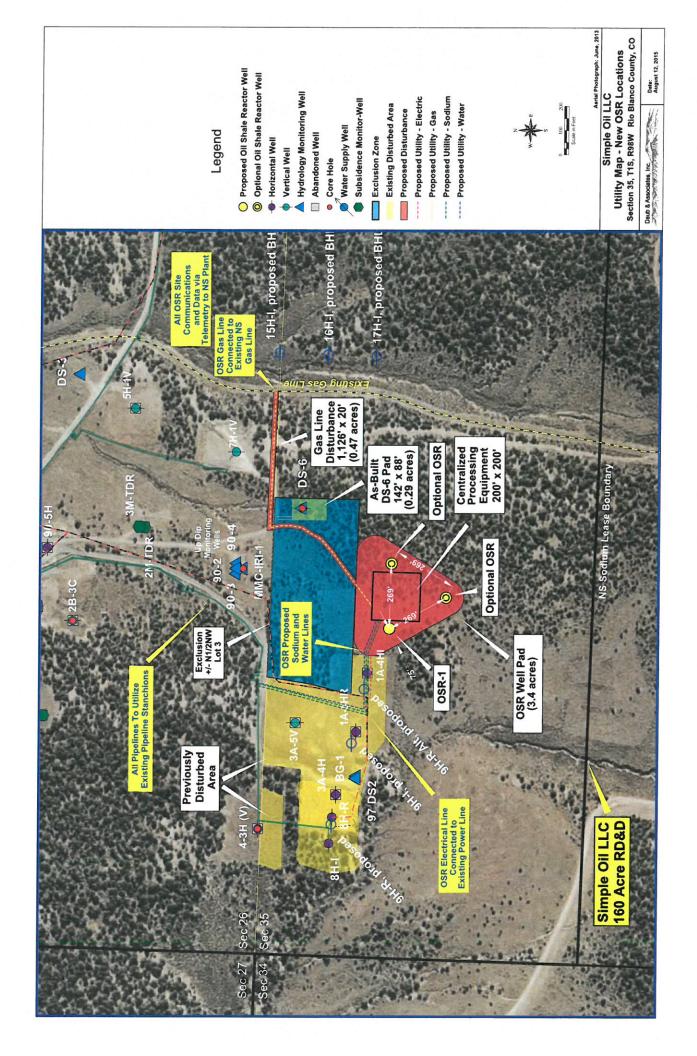
25. Signature J. J. Want	Name (Printed/Typed)	aub 8-12-45
Title President De	aub & Associates	IWC.
Approved by (Signature)	Name (Printed/Typed)	Date
Title	Office	
Application approval does not warrant or certify that the applicant	holds legal or equitable title to those rights in the subject lea	ase which would entitle the applicant to

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.





## SIMPLE OIL LLC OIL SHALE RD&D PROJECT

WELL CONSTRUCTION SPECIFICATIONS (PROPOSED)	2016 Proposed OSR-1 RD&D Oil Shale
	Recovery Well
CONDUCTOR HOLE & CASING (CON)	
CON OPEN HOLE/BIT DIAMETER, in. (maximum)	30.0
CON OPEN HOLE TD, ft. GL	100.0
CON CASING, CEMENTED, SET DEPTH, ft. GL	100.0
CON CASING SIZE, OD in.	24.0
CON ANNULUS, in.	3.0
INTERMEDIATE HOLE & CASING (INT)	
INT OPEN HOLE/BIT DIAMETER, in.	19.0
INT OPEN HOLE TD, ft. GL	2,900.0 +/-
INT CASING, CEMENTED (thermal), SET DEPTH, ft. GL	2,330.0 +/-
INT CASING SIZE, OD in.	16.0
INT ANNULUS, in.	1.5
PRODUCTION EQUIPMENT SPECS	
5.5" OD SS 316 CASING (5.0" ID), CEMENTED (thermal), SET DEPTH, ft. GL	2,350.0 +/-
NITROGEN GAS CAP SET DEPTH, ft. GL	VARIABLE
2.0" OD HOT OIL DUAL STRING CLOSED LOOP RECIRCULATION TUBING, SS 316, SET DEPTH, ft. GL	2,872.0 +/-
2.0" OD PRODUCED VAPOR RECOVERY TUBING, SS 316, SET DEPTH, ft. GL	2,810.0 +/-
2.0" OD PRODUCED OIL RECOVERY TUBING, SS 316, SET DEPTH, ft. GL	2,870.0 +/-

## **Simple Oil LLC** Daub & Associates, Inc. **Drilling and Well Completion Diagram** TO THE SECTION OF THE PARTY OF Well: OSR-1 Well Type: Oil Shale Reactor **Hole Type: Production Well** Section: 35 Elevation: 6705, estimated Township: 1S Ground Level, ft (top of conductor casing) Date: 8/12/2015 Range: 98W stratigraphy from prog Stratigraphy **Well Completion Pressure Control Well Head** 30" Surface Hole 0 to 100' 100 24.0" OD Conductor Casing 0 to 100', cemented (thermal) to surface 200 300 400 500 600 **Uinta-Uinta Transition** 700 800 900 1000 19.0" Intermediate Hole 100' to 2900' +/-1100 Intermediate Casing 16" OD: 0-2330', cemented (thermal) to surface 1200 Recovery Casing (Production Side), SS 316 5.5" OD x 5.0" ID: 0 to 2350', cemented (thermal) to surface R-8 Zone 1300 **Produced Vapor Recovery Tubing, SS 316** 2.0" OD: 0-2810' +/-1361 A-Grv 1400 **Produced Oil Recovery Tubing, SS 316** 2.0" OD: 0-2870' +/-R-7 Zone 1500 1551 B-Grv Recovery Casing (Hot Oil Closed Loop Side), SS 316 5.5" OD x 5.0" ID: 0 to 2350', cemented (thermal) to surface 1600 R-6 Zone Hot Oil Closed Loop Recirculation Tubing, SS 316 2.0" OD: 0-2872' 1700 1753 1800 L-5 Zone DS: 1865.0 1900 -5 B&C: 1871.0-1891.0 UBB Nahcolite: 1891.0-1913.0 2000 OSMB: 1913.0-1917.0 LBB Nahcolite: 1917.0-1921.0 2200 Lower Salt 2185.0-2264.0 2282 2300 -Love Bed: 2339.0-2347.0 L-4 Zone 2433 Variable pressurized nitrogen or other inert gas cap extending from surface to top of mining interval. 2500 R-4 Zone 2600 L-3 Zone 2700 R-3 Zone Greeno Bed: 2724.0-2732.0 2779 TI Bed: 2797.0-2806.0 L-2 Zone 2800 **Produced Gas Vapor** Reactor Interval: 2830-2870 R-2 Zone **Produced Shale Oil** 2907 **Residual Water** L-1 Zone Hole TD: 2900' +/-

3000