



00375312

**STRACHAN EXPLORATION
1675 BROADWAY SUITE 2330
DENVER, COLORADO 80202**

WELL NAME: South Piceance Creek #3

**LOCATION: 1250 FWL, 1980 FNL
SW-NW-Sec 19, T3S, R95W, 6th P.M.
Rio Blanco, County, Colorado**

FIELD: South Piceance Creek

ELEVATION: G.L. 7298

I. GEOLOGY

A. Estimated tops of important geological markers with an assumed GL of 7298' are as follows:

<u>FORMATION</u>	<u>MEASURED DEPTH</u>	<u>SUBSEA DEPTH</u>
Green River, Undif	Surface	7,298'
Parachute Creek	1,373'	5,925'
Garden Gulch	2,333'	4,965'
Orange Marker	2,858'	4,440'
Douglas Creek Sands	2,988'	4,310'
Total Depth	3,100'	4,198'

B. Estimated depth of anticipated water, oil, and gas bearing formations:

<u>FORMATION</u>	<u>INTERVAL MEASURED SECTION</u>	<u>SUBSTANCE</u>
Green River, Undif.	Surface- 1,100'	Air
Green River, Undif.	1,100'-1,373'	Water
Parachute Creek	1,373'-2,333'	Water and Gas

Garden Gulch	2,333'-2,858'	Gas and Oil
Douglas Creek	2,858'-3,100'	Gas

II. DRILLING PROGRAM.

- A. Build location for contractors' rig. Dig mousehole and rat hole and set conductive pipe. Move in and rig up rotary rig.
- B. Drill 12 1/4" surface hole to \pm 300' KB. Maximum deviation 1 1/2 degrees at 300'.
- C. Run and cement 300', 9 5/8", 36#, J-55 ST&C casing at 300'. Cement to surface per cement detail in part III. If required, perform top job with premium cement.
- D. Wait on cement a minimum of 4 hours. Install 9 5/8" x 11" 3M casing head. Nipple up BOP stack. Test BOPE and pipe as outlined below.
- E. Drill 8 3/4" hole to 2950'. Maximum deviation 3 degrees at 2950'.
- F. Run dual induction log to surface casing.
- G. Run and cement 2950', 7", 20#, K-55 ST & C casing at 2950'. Cement to surface per cement detail in part III. If necessary, perform top job with premium cement.
- H. WOC 8 hours. Drill 6" hole to E.T.D. of + 3100'. Maximum deviation 3 1/2 degrees at T.D.
- I. Completion will be open hole. Gamma Ray log will be run during completion for correlation.

III. CASING AND CEMENTING PROGRAM.

A.

<u>TYPE</u>	<u>HOLE SIZE</u>	<u>SETTING DEPTH</u>	<u>SECTION LENGTH</u>	<u>SIZE, WEIGHT AND GRADE</u>	<u>NEW/USED</u>
Conductor	24	80	0-80	14" Steel	used
Surface	12 1/4	300	0-300	9 5/8" 36# K-55	new
Intermediate	8 3/4	2950	0-2950	7" 20# J-55	new

B. Cement Program.

Conductor Cement to surface with standard cement with 2% accelerator.

Surface Cement to surface. 160 sacks class G with 2% CaCl₂ and 0.25#/sk cello-seal. Design is 100% excess. Slurry weight 15.8#/gal, yield 1.16 cu-ft/sack. Float equipment will include guide shoe, float collar, 3 centralizers.

Intermediate Actual volumes may be adjusted after logging. Cement to surface. Lead 150 sacks light with 3% CSE, 3% accelerator, 0.25#/sack cello-seal. Slurry weight 11#/ gal, yield 3.5 cu-ft/sack. Tail 100 sack G with 0.25#/sack cello-seal. Slurry weight 15.8#/gal, yield 1.15 cu-ft/ sack. Float equipment will include guide shoe, float collar, 6 centralizers.

IV. BLOW OUT PREVENTION EQUIPMENT. As most area rigs are equipped with 3M systems. The following will apply. If a 2M system is available, a sundry notice will be submitted to reflect any change of plans.

- A. Well Head. Weld on 9 5/8" x 11" 3M casing head. Test to 1000#. Casing head should have 2" LP outlets with 2" bull plug on one side and 2" 3M ball valve on the other side.
- B. A 3M BOP system consisting of blind rams on bottom, pipe rams and an annular on top, appropriate kill line, choke line and manifold with chokes will be rigged up after cementing surface casing. Before drilling out the surface casing, the stack and associated BOP equipment will be tested to 3,000 PSI (hydrill to 2,000 PSI) with test plug. All tests will be for 10 minutes. The BOPE will be tested every 30 days, whenever any seal subject to test is broken or following any related repairs.
- C. All casings strings will be pressure tested to a minimum of 1,500 PSI or .22 PSI/ft, whichever is greater, but not to exceed 70% of the internal yield of the pipe prior to drilling out cement.
- D. The accumulator will have sufficient capacity to open the hydraulically controlled choke line valve (if so equipped), close all rams plus the annular preventor and retain a minimum of 200 PSI above the recharge on the closing manifold without the use of closing pumps. The accumulator system will have two independent

power sources to close the preventors.

- E. The accumulator with hydraulic BOP controls will be located in the accumulator shed with a hydraulically operated remote station located on the drill floor or in the dog house.
- F. Auxiliary Equipment. An upper kelly cock, safety valve and subs to fit all drill string connections, hand wheels or other locking devices on the ram type preventors.
- G. Other.
 - 1. Blind and pipe rams will be activated each trip and recorded in the driller's log.
 - 2. The annular will be function tested at least once a week and recorded in the driller's log.
 - 3. BOP pressure tests and results will be recorded in the driller's log.
 - 4. The size, weight, grade, thread, and footage of all casing run will be recorded in the driller's log.
 - 5. The amount and type of all cement pumped will be recorded in the driller's log.
 - 6. Slow pump rates will be taken every tour and recorded in the driller's log.

D. MUD PROGRAM.

- A. Surface to 300' - Drill with air. If hole makes water a foaming agent will be added to help clean hole.
- B. 300' - 2950' - This section will be drilled with air. Wells in the area have made water so a foaming agent will be added to help reduce hydrostatic head and help with hole cleaning.
- C. 2950' - 3100' ETD. This section will also be drilled with air with mist and foam added as required for proper hole cleaning.
- D. A flare pit will be dug a minimum of 100' from the structure. Lines to the flare pit will be staked, and the flare system will have an effective source of ignition.

VI. EVALUATION.

- A. No DSTs anticipated.
- B. No cores anticipated.

- C. Logs: Dual induction log at 2950' to 300'.
: Gamma-ray 3100' to 2950'

VII. ABNORMAL CONDITIONS.

- A. No abnormal pressures are anticipated.
- B. No abnormal temperatures are anticipated.
- C. No hydrogen sulfide is anticipated.
- D. Anticipated bottom hole pressure 500 PSI.



**SURFACE USE PROGRAM
SOUTH PICEANCE CREEK #3
SW-NW SEC 19, T3S, R95W
RIO BLANCO COUNTY, COLORADO**

I. EXISTING ROADS

From Rifle, go north 18.6 miles \pm in a northerly direction on Highway #13. Go west on County Road #5 for 12.0 \pm miles. Turn south on Sprague Gulch road. Stay on main road for 5.5 \pm miles. Turn back northerly on an existing trail that will need upgrading for 2.8 \pm miles. All roads will be maintained in the same or better condition than currently exists.

II. ACCESS ROADS

No new access road will be required. The existing trail will need rerouting at the well site on fee surface.

III. LOCATION OF EXISTING WELLS: The attached "Topo Map C" shows existing wells within a one mile radius. The Strachan Exxon #1 well is the only active well within this radius. All other oil and gas wells have been plugged and abandoned. There are no known water, injection or disposal wells within this radius.

IV. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES: There are no existing facilities at this site. If this well is subsequently completed as a productive well it will probably require a separator, a 210 BBL oil tank, a 210 BBL water tank, a diesel storage tank and a meter house. The operator will supply this information based on test data prior to installation.

V. LOCATION AND TYPE OF WATER SUPPLY: Fresh water will likely be purchased from Mr. Per Sten Johnson, the surface owner. The point source is not known at the present time. If an agreement for water can not be obtained from Mr. Johnson, another local source will be found. No water wells will be drilled.

VI. CONSTRUCTION MATERIALS: If any sand or gravel is required for construction, it will be acquired from private sources.

VII. METHODS OF WASTE DISPOSAL.

A. Drill cuttings will be drained from the flare pit and contained in the reserve pit.

- B. Drilling fluids will be contained in the reserve pit and allowed to evaporate and/or trucked away to an approved disposal site.
- C. Any oil recovered during drilling and completion operations will be contained in a test tank and sold when the well is put on production. Any water recovered will be put in the reserve pit and any gas produced will be flared.
- D. Sewage will be maintained in chemical toilets. Living quarters will have self contained sewage storage or will drain into tanks and be hauled to approved disposal site as needed or at the conclusion of the proposed well.
- E. Garbage will be collected in trash bins and hauled off to an approved disposal site as needed or at the conclusion of the proposed well. No garbage or waste products of any kind will be burned or buried on the location.
- F. The reserve pit will be fenced on three sides while drilling operations are underway. The fourth side will be fenced when the drilling rig is moved off the location. The rat hole and mouse hole will be filled in after the drilling rig has moved off location.

VIII. ANCILLARY FACILITIES.

No camps, airstrips or other related facilities will be constructed.

IX. WELL SITE LAYOUT.

- A. The attached "Location Layout" plat shows the reserve pit, well location, access road and soil stockpiles.
- B. The same "Location Layout" plat shows the location of living/office quarters and other facilities.
- C. The reserve pit will be 150' x 50' x 8' deep. The reserve pit will not be lined but will be fenced as described in VII F.
- D. A 12' x 25' x 8' flare pit will be located at the north west corner of the location. No fluids will be allowed to accumulate in the flare pit. The pit will be a minimum of 100' from the rig substructure and 30' from the reserve pit fences.

X. PLANS FOR RECLAMATION OF SURFACE.

- A. The drilling fluids in the reserve pit will be allowed to evaporate and/or be trucked to an approved disposal site. The pit will be backfilled per surface owner requirements. All

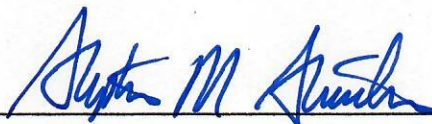
other reclamation activities will conform to surface owner requirements.

II. The location and a portion of the access road are owned by Mr. Per Sten Johnson; 1532 S. County Road #17-C, Loveland, CO 80537. The remainder of the access road is owned by the Federal Government and administered by the BLM. Right of ways for the portions of the road on private surface will be obtained by the operator prior to moving in any equipment.

XII. LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATION

**STEPHEN M. STRACHAN, PRESIDENT, STRACHAN EXPLORATION
1675 Broadway Suite 2330
Denver, Colorado 80202**

I hereby certify that I or persons under my direct supervision have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan to the best of my knowledge true and correct; and that the work associated with the operations proposed herein will be performed by Strachan Exploration and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provision of 18 U.S.C. 1001 for the filing of a false statement.



Stephen M. Strachan, President

9-15-94

Signed This Date

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SEP 21 1994

COLO. OIL & GAS CONS. COMM.