

DESOTO CANYON 491 #1 ST1 – RAPTOR WELL
OCS-G-23516

OPERATIONAL SUMMARY

1. The pressure test conducted during open hole abandonment operations (2,850psi with a 12.2ppg MW) will be utilized to meet the 14' casing test requirements of the approved AST test pressure.
2. Run in hole with whipstock assembly and set at $\pm 15,257'$ MD/TVD.
3. Displace well from 12.2ppg SBM to 10.5ppg SBM.
4. Mill window in 14" and 16" casing.
5. Drill 10'+ of new formation and conduct casing shoe pressure integrity test.
6. Drill a 12-1/4" x 14" hole to the 11-7/8" intermediate liner depth. Increase the MW as required. Circulate and POH.
7. MU the 11-7/8" casing with a liner hanger and liner top packer. Run the liner to casing setting depth. Cement the 11-7/8" liner. Set hanger and TOL packer. Pressure test the TOL packer. Pressure test BOPs if required.
8. Pressure-test the 14" x 11-7/8" casing. Drill out the shoe track and 10'+ of new formation and conduct an 11-7/8" casing shoe pressure integrity test.
9. Drill a 10-5/8" x 12-1/4" hole to 9-7/8" liner setting depth. Increase MW as required. Circulate & POH.
10. Log the open hole as required.
11. MU the 9-7/8" casing with a liner hanger and liner top packer. Run the liner to casing setting depth. Cement the 11-7/8" liner. Set hanger and TOL packer. Pressure test the TOL packer. Pressure test BOPs if required.
12. Pressure-test the 14" x 11-7/8" x 9-7/8" casing. Drill out the shoe track and 10'+ of new formation and conduct a 9-7/8" casing shoe pressure integrity test.
13. Drill an 8-1/2" hole to total depth. Increase MW as required. Circulate & POH.
14. Log the open hole as required.
15. At this point the well will be prepared to conduct one of the following operations:
 - a. Temporarily abandon the well.
 - b. Plug the open hole, set a whipstock and conduct a sidetrack to a new bottom-hole location.
 - c. Plug and abandon the well.

The operation selected will be addressed in the future by submitting a new APM or AST to BSEE.

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CEMENTING PROGRAM

Casing Size	Cement Slurry	Vol ft ³	Estimate TOC	
			TVD	MD
11 ⁷ / ₈ "	Class H + additives	570	17,921'	18,581'
9 ⁷ / ₈ "	Class H + additives	530	18,784'	19,781'

Cement volumes may be adjusted to caliper logs as available; or to adjust cement tops as dictated by potential pay intervals encountered, (or not encountered), in the intermediate and production hole intervals.

Cement slurries and additives may be revised depending on actual hole conditions encountered.

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MUD PROGRAM

Interval (TVD)	Mud Type	Weight (ppg)
15,257 – 19,000'	Synthetic Drilling Fluid*	10.5 – 11.2
19,000 – 21,200'	Synthetic Drilling Fluid*	12.5
21,200' – TD	Synthetic Drilling Fluid*	12.0 – 12.2

* Baroid Accolade

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EPA guidelines for mud toxicity and mud discharge will be observed.

All non-toxic, (as determined by LC-50 toxicity test per EPA guidelines), mud and cuttings which meet the requirements of NPDES General permit GMG 290000 will be disposed of in the following manner:

- (1) Cuttings disposed of overboard as circulated. Any mud and any associated cuttings from a mud which do not meet the discharge permit requirements will be transported to shore for proper disposal.
- (2) Whole synthetic mud not associated with cuttings will not be discharged or disposed of overboard and will be transported to shore for proper disposal.

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**Baroid Products
For Accolade System**

Product
ACCOLADE BASE OIL
ADAPTA HP
AQUAGEL GOLD SEAL
ATC
BARACARB 25
BARACARB 50
BARACARB 150
BARAKLEAN
BARAZAN D PLUS
BAROID BULK
BAROFIBRE
CALCIUM CHLORIDE
CAUSTIC
DRILTREAT
EZ-MUD
EZ-PLUG
LE SUPERMUL
LIME
PAC-L
RHEMOD L
RISERVIS
STEELSEAL
EZ-PLUG
TEMPERUS

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Drillpipe Inventory for Drilling and Running Casing

The drillpipe sizes and types below may be run below the BOP during drilling operations.

<u>SIZE X NOMINAL WALL THICKNESS</u>	<u>GRADE</u>	<u>CONNECTION</u>
6-5/8" X 0.522" WALL (34 PPF)	S-135	6-5/8" FH
6-5/8" X 0.625" WALL (40 PPF)	S-135	6-5/8" FH
6-5/8" X 0.625" WALL (40 PPF)	V-150	6-5/8" FH
6-5/8" X 0.813" WALL (64 PPF)	S-135	6-5/8" FH
6-5/8" X 0.813" WALL (64 PPF)	Z-140	6-5/8" FH
5" X 0.362" WALL (19.5 PPF)	S-135	GP DS-50

Heavier landing string sizes may be used to run casing but will not be run below the BOP.