

Tina TjD
Peter B
Kevin King

MONITOR WELL PRE-SPUD PROPOSAL

- 1) WELL NAME/NUMBER: WB-9

- 2) PROPOSED LOCATION: (a) General (on or off-site) On-site
(map attached) Site Area Facility boundary southeast of 100 area
(b) Sect 11 Twnshp 21S Rng 3E SE ¼ SE ¼ SE ¼ SE ¼

- 3) WELL PARAMETERS:
 - (a) Est. total depth 450 (ft) (b) Est. ground elevation @4995 ft
 - (c) Anticipated stratigraphy:
Alluvium (Santa Fe Group) from 0 ' to 200 ' (depth)
Limestone (Panther Seep) from 200 ' to 450 ' (depth)
 - (d) Anticipated water bearing horizon(s):
Limestone (Panther Seep) at 300 ' (depth)
_____ at _____ ' (depth)
 - (e) Anticipated static water level 240 ' (depth)

- 4) WELL PURPOSE/JUSTIFICATION (attach maps and table if needed):
Westbay well to determine vertical distribution of groundwater contamination, if any, southeast of 100 Area.

- 5) PROPOSED DRILLING PARAMETERS:
 - (a) Drilling method(s): (air/foam/mud rotary/auger/etc.)
Mud Rotary from 0 ' to 210 ' (depth)
Air Foam Rotary from 210 ' to TD ' (depth)

Air-foam method: "Quik-Foam" surfactant/water mixture used in conjunction with filtered compress air.

Mud-rotary method: Bentonite mud/water mixture.

TD = Total Depth

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(b) Lithology sampling - collect sample every:

5' intervals Method Grab from 0 ' to TD ' (depth)
Core type 6" Dennison from _____ ' to _____ ' (depth)
2" Christiansen from _____ ' to _____ ' (depth)

(c) Anticipated drilling additive(s): E-Z mud

7) PROPOSED WELL COMPLETION DESIGN/MATERIALS

(a) Casing:	<u>Material</u>	<u>Diameter</u>	<u>From</u>	<u>To</u>	<u>Comments</u>
Temporary	_____	_____	_____	_____	
Surface	<u>carbon steel</u>	<u>5"</u>	<u>0</u>	<u>210'</u>	
Completion Pipe	<u>PVC-Sch 8*</u>	<u>2"</u>	<u>0</u>	<u>TD</u>	<u>*</u>

* open borehole completion using Westbay couples, pumping ports, monitoring ports, and packers.

(b) No filter pack required (packers placed in open borehole).

8) PROPOSED WELL DEVELOPMENT

(a) Purge all fluids from hole prior to well completion.

9) WELL AUTHORIZATION

(a) Proposed by Geoscience Consultants, Ltd.

(b) Authorized William E. Waldrip NASA W. E. Waldrip
(name) (representing) (signature)

