VS V
Peter R
Dave AS

MONITOR WELL PRE-SPUD PROPOSAL

1) WELL NAME/NUMBER: PL-2

2) PROPOSED LOCATION: (a) General (on or off-site) Off-site
(attach map) Site Area Private Land
(b) Sect 5 Twnshp 21S Rng 3E NE ¼ ~~NW~~ E ¼ NW ¼ NE ¼
50' FNL
1650' FEL

3) WELL PARAMETERS:
(a) Est. total depth 500 (ft) (b) Est. ground elevation 4500 ft
(c) Anticipated stratigraphy:
Alluvium (Santa Fe Group) from 0 ' to TD ' (depth)
_____ from _____ ' to _____ ' (depth)
_____ from _____ ' to _____ ' (depth)
(d) Anticipated water bearing horizon(s):
Alluvium (Santa Fe Group) at 460'-TD ' (depth)
_____ at _____ ' (depth)
(e) Anticipated static water level 460' ' (depth)

4) WELL PURPOSE/JUSTIFICATION (attach maps and table if needed):
Determine level of groundwater contamination, if any, in the uppermost part of the alluvial aquifer on the up side of a major subsurface fault

5) PROPOSED DRILLING PARAMETERS:
(a) Drilling method(s): (air/foam/mud rotary/auger/etc.)
mud rotary ' from 0 ' to 100 ' (depth)
air-foam rotary ' from 100 ' to TD ' (depth)
_____ ' from _____ ' to _____ ' (depth)

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

Mud-rotary method: Bentonite mud/water mixture.

* Stiff-foam (Quik-foam/EZ-mud/water mixture) may be used near the bottom of the borehole should conditions become unstable. Severe borehole instability would require changing to drilling with mud.

(b) Lithology sampling - collect sample every:

5' intervals Method Grab from 0 ' to TD (depth)

Core type 6" Dennison from 485 ' to 490 ' (depth)*

2" Christiansen from _____ ' to _____ ' (depth)

2" Christiansen from _____ ' to _____ ' (depth)

*core saturated alluvium

(c) Drilling rig type: Franks rotary rig for surface casing, Chicago Pneumatic rotary rig to TD

(d) Anticipated drilling additive(s): None

Water source NASA Quality checked by GC (method)

(e) Decontamination/Quality Assurance:

Clean equipment by steam (method) prior to every well

Clean tools by steam (method) prior to every well

Other QA procedures Air filtering/monitoring, periodic steam cleaning of tools/sampling equipment when necessary

(f) Drilling company: Larjon Drilling

address: P.O. Box 925, Las Cruces, New Mexico 88047

Company representative: Larry Johnson Phone 505-526-8672

6) PROPOSED BOREHOLE GEOPHYSICS

(a) Survey type: Drift Log from 0 ' to TD (depth)

Survey type: GR - Neutron from 0 ' to TD (depth)

Survey type: GR-Den-Res-Cal from 0 ' to TD (depth)

Survey type: 16"-40" E-Log from W.L. ' to TD (depth)

(b) Geophysical company: Southwest Survey

address: 4200 Skyline Drive, Farmington, NM 87401

Company representative: Don Pearson Phone 505-325-8531

7) PROPOSED WELL COMPLETION DESIGN/MATERIALS

(a)

Casing:	Material	Diameter	From	To	Comments
Temporary					
Surface	steel	10"	0	100'	
Blank (riser)	stainless +	4"	0	+3'	
Screen (10')	stainless ++	4"			0.02"
Completion Pipe	stainless +	4"	0	TD	
Silt trap	stainless +	4"	to 5' below screen		
Protective Cap	stainless +	4"	on top with lock		

\+ Type 304, Schedule 5 stainless steel
Type 304, Schedule 10 stainless steel used below 400 feet
++ Extra strength screen used below 450 feet

(b) Filter pack.

	Primary	Secondary
Material type	Prewashed sand	Prewashed sand
Grain Size	8/20 grade	16/40 grade
Est. length (thick)	20 feet	2-3' above & below 8/20

(c) Seal - Upper: Bentonite Thickness 5 feet above upper 16/40 sand

Lower: Bentonite Thickness 5 feet below lower 16/40 sand

(d) Grout - Material 5% Bentonite cement from above completion zone to the surface

8) PROPOSED WELL DEVELOPMENT

(a) Development method Surge and pump

Equipment Pulling unit with bailer & submersible pump

(b) Anticipated flow rate 5-15 gpm Duration until adequately devel.

(c) Company providing service Larjon

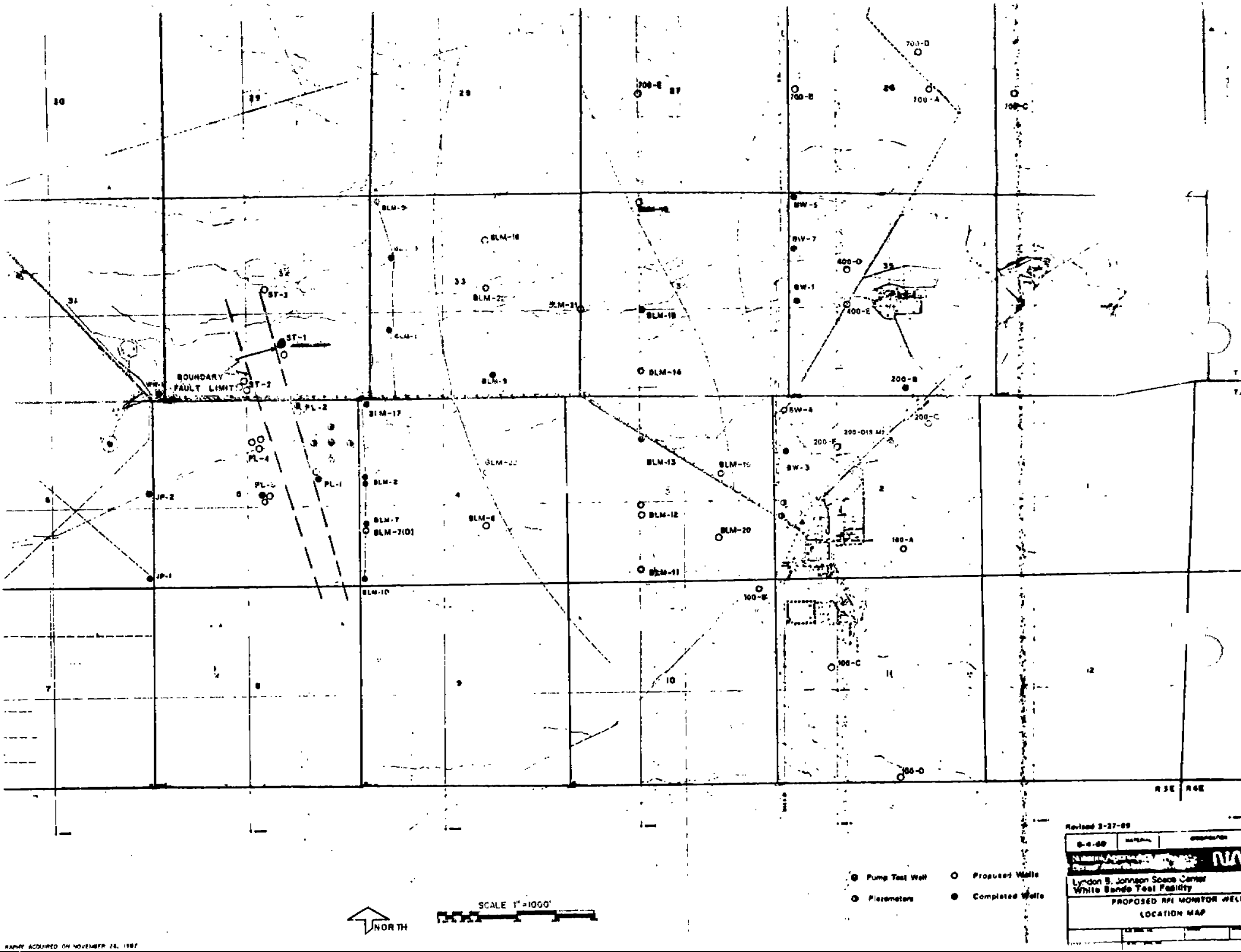
9) WELL AUTHORIZATION

(a) Proposed by Geoscience Consultants, Ltd.

(b) Authorized Robert Mitchell NASA Robert E Mitchell 15 Sept 88

(name) (representing) (signature)

FORMS\PRESPUD.FRM



MAPPY ACQUIRED ON NOVEMBER 25, 1997