**From:** Andrew Parker
**To:** Yu, Olivia, EMNRD; "Mann, Ryan"
**Cc:** Billings, Bradford, EMNRD; mattp@pride-energy.com; "Randall Hicks"
**Subject:** [EXT] RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625
**Date:** Tuesday, October 23, 2018 9:47:12 AM
**Attachments:** Tank Battery - Response to NMOCD oct 2018 email.pdf

Ms. Yu:

Attached is our response to the email below. Included in the response is our understanding of 19.15.29 and an example of reserve pit orientation typical of drilling practices in the 1970s.

I will be sending you and Mr. Mann an invite to meet at the site for next Monday (October 23). If you cannot make it I would like to schedule a meeting with you to discuss remediation at the location in your office sometime later that week.

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

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**From:** Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
**Sent:** Sunday, October 07, 2018 11:17 AM
**To:** Mann, Ryan; 'Andrew Parker'
**Cc:** Billings, Bradford, EMNRD; Naranjo, Mark; mattp@pride-energy.com; taylorp@pride-energy.com; 'Randall Hicks'
**Subject:** RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

Messrs. Parker/Pride:

Relevant comments stated for 1RP-4624 are applicable to 1RP-4625. NMOCD will not grant deferral for remediation until release characterization/delineation is completed for 1RP-4625. Delineation for TPH extended are still required for the area represented by NW berm. If the tank battery is situated on top of a drilling pit, please provide documentation for verification.

Thanks,
Olivia

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**From:** Mann, Ryan <rmann@slo.state.nm.us>
**Sent:** Thursday, October 4, 2018 1:27 PM
**To:** 'Andrew Parker' <andrew@rthicksconsult.com>; Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
**Cc:** Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>; mattp@pride-energy.com; taylorp@pride-energy.com; 'Randall Hicks' <r@rthicksconsult.com>
**Subject:** [EXT] RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

NMSLO has the same concerns as 1RP-4624. Any impacted areas need to be reclaimed to their prior condition (i.e. pasture), regardless of the results of the soil samples. This includes the historic portions. The exception is the playa. Any further remediation may be counterproductive to the functionality of the playa.

Ryan Mann
Remediation Specialist
Field Operation Division
(575) 392-3697
(505) 699-1989
New Mexico State Land Office
2827 N. Dal Paso Suite 117
Hobbs, NM 88240

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**From:** Andrew Parker [mailto:andrew@rthicksconsult.com]
**Sent:** Thursday, August 30, 2018 5:05 PM
**To:** 'Yu, Olivia, EMNRD' <Olivia.Yu@state.nm.us>; Mann, Ryan <rmann@slo.state.nm.us>
**Cc:** 'Billings, Bradford, EMNRD' <Bradford.Billings@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>; mattp@pride-energy.com; taylorp@pride-energy.com; 'Randall Hicks' <r@rthicksconsult.com>
**Subject:** RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

Ms. Yu:

Attached is the remediation plan for the above referenced tank battery site. Please note I will be out of the office from Aug. 31st through September 15th.

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

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**From:** Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
**Sent:** Friday, July 20, 2018 10:04 AM
**To:** Andrew Parker; Mann, Ryan
**Cc:** Billings, Bradford, EMNRD; mnaranjo@slo.state.nm.us; mattp@pride-energy.com; taylorp@pride-energy.com; Randall Hicks
**Subject:** RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

Good morning Mr. Parker:

Postponement of remediation for the release assigned 1RP-4625 is DENIED. This release occurred in early-mid January 2017 with months of unnecessary delay in addressing the impacted area, especially unjustified as the release occurred adjacent to a playa, which is a waterbody of New Mexico.

The release area around the tank battery, represented by NW berm data, and well pad, represented by TT-1 July 2017 data, will need additional vertical delineation.

NMSLO may have additional concerns.

Thanks,
Olivia

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**From:** Andrew Parker
**Sent:** Tuesday, June 26, 2018 5:21 PM
**To:** Yu, Olivia, EMNRD
**Cc:** Billings, Bradford, EMNRD ; mnaranjo@slo.state.nm.us; mattp@pride-energy.com; taylorp@pride-energy.com; Randall Hicks
**Subject:** RE: Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

Ms. Yu:

Attached is the characterization and remediation plan for Pride Energy's NM 87 State 001 (Tank Battery) release. Please note that we ask NMOCD for a temporary deferment to the proposed restoration and remediation plan. The purpose of the request is to postpone remediation/restoration design until the final ruling of NMOCD's proposed application to repeal and replace Rule 19.15.29 NMAC (the Rule). The final ruling is expected to be delivered by the first week of August 2018.

Thank you,

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

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**From:** Andrew Parker [mailto:andrew@rthicksconsult.com]
**Sent:** Wednesday, March 28, 2018 3:51 PM
**To:** Olivia.yu@state.nm.us
**Cc:** bradford.billings@state.nm.us; mnaranjo@slo.state.nm.us; mattp@pride-energy.com; taylorp@pride-energy.com
**Subject:** RE: Pride Energy NM 87 State 001 (Wellhead) 1RP-4624

Ms. Yu:

Please consider this the 48-hour advanced notice to perform characterization as outlined in our March 28, 2018 report submitted to Pride Energy with a copy to NMOCD. We plan to arrive at the wellhead location late afternoon on April 2, 2018, after completion of characterization at the tank battery location . We welcome NMOCD to observe the characterization and we are prepared to answer any questions NMOCD may have. Any person on-site will be required to have steel toe boots, ear protection, and hardhat as PPE.

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

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**From:** Andrew Parker [mailto:andrew@rthicksconsult.com]
**Sent:** Wednesday, March 28, 2018 3:29 PM
**To:** mattp@pride-energy.com; taylorp@pride-energy.com
**Cc:** bradford.billings@state.nm.us; mnaranjo@slo.state.nm.us; Olivia.yu@state.nm.us
**Subject:** Pride Energy NM 87 State 001 (Tank Battery) 1RP-4625

Mr. Pride:

Attached are the results of the first characterization plan and the proposed activities for the second characterization. Please note that NMAC 19.15.29 does not require NMOCD approval of characterization plans. After reviewing second characterization results, we will determine the best approach on whether to

1. Perform corrective actions under the current regulation, or
2. Ask for a variance using the proposed cleanup criteria levels as a guidance as discussed in the attached plan.

We plan on performing the second characterization on the afternoon of April 2, 2018. A notice to NMOCD will follow this email.

Per NMAC 19.15.29, the next formal submission to NMOCD is either a remediation (correction action) or closure plan – at which time NMOCD can either deny or approval the plan. The type of submission and path forward will be based on data collected during the characterization using standards and

regulations in-place at the time. A formal variance may be requested at the time of formal submission to NMOCD.

Andrew Parker
R.T. Hicks Consultants
Durango Field Office
970-570-9535

# R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Since 1996
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October 23, 2018

Olivia Yu
NMOCD District 1
1625 N. French Dr.
Hobbs, NM 88240

RE: **Response to NMOCD's October 4th and 7th, 2018 email**

Operator: Pride Energy Company
NM 87 State #001 **(Tank Battery)**
API#: 30-025-23655
Section 33-14S-34E: Unit K
Lea County, New Mexico
Site Characterization Report and Remediation Plan 1RP-4624

Ms. Yu:

The purpose of this response is to clarify 1) our proposed remediation plan in our August 30th, 2018 submission and 2) provide our understanding of 19.15.29 NMAC.

Per 19.15.29.11.A.(5).(b) the horizontal and vertical characterization of releases will be delineated to Table 1 of 19.15.29.12 constituents, which also includes closure criteria "limits". Characterization will not be considered complete until soil sampling shows the constituents of concern are below Table 1 limits.

Furthermore, 19.15.29 NMAC refers to remediation as:

1. Restoration – for areas "in-use"
2. Reclamation – for areas "no longer in-use"

All surfaces shall be remediated in accordance with 19.15.29.13. In addition, surface soils within the areas that are "in-use" shall be restored and meet the closure criteria limits listed in Table 1. Surface soils that are "no longer in-use" shall be reclaimed to Table 1 limits and the upper 4-feet of soil shall contain less than 600 mg/kg chloride.

As shown on Exhibit 1, attached, the pink outline defines the "in-use" area based upon historic aerial photos, a current aerial photo, and site reconnaissance of the active tank battery. Pride Energy acquired the former salt water disposal location in February 2007 and has no survey plats in their files. The former well was first spudded in 1970. No site specific survey exists in NMOCD's online files. Mr. Mann with the State Land Office has not survey plats showing lease extents.
Included on Exhibit 1 are chloride and TPH concentrations in mg/kg. Sample depths showing a range were averaged from discrete samples. Discrete sample depths are noted

otherwise. Very hard caliche exists throughout the area at 0.5 feet. During the January 2018 backhoe trench investigation 0.5 feet depth was the depth that the backhoe encountered refusal. We returned to the location in April 2018 and drilled three boreholes for extended vertical delineation.

Trench sampling locations that showed:

- the area is "no longer in-use", and
- reclamation is occurring , where
    - chloride < 600 mg/kg at the surface, and
    - indications of natural revegetation is beginning to occur

was omitted from further vertical delineation. The two exceptions were SB-03 Playa and SB-02 Historic. SB-03 Playa was vertically delineated at the request of the State Land Office. SB-03 Playa is below Table 1 limits including chloride <600 mg/kg in the upper 4-feet. Vertical delineation showed that SB-02 Historic requires reclamation for areas "no longer in-use" per 19.15.29.13.D and concurrence with the State Land Office.

For sampling locations within areas "in-use" only the 2017 Northwest (within berm) location shows TPH above Table 1 limits. As shown in Exhibit 2, the area is most likely within a former reserve pit. In the 1970s, when wells were originally drilled, a reserve pit was commonly constructed north of the wellhead and unlined. The left panel on Exhibit 2 is an example of a reserve pit captured in a December 1971 aerial photograph - 1.7 miles northwest of the tank battery location.

As discussed in our August 2018 report, and summarized below with clarification, we propose:

- For areas "no longer in-use" - we will continue to monitor for natural reclamation of surface soils to ensure surface re-vegetation continues to develop. We will perform remediation of soils near SB-02 Historic so that soils in the upper 4-feet are <600 mg/kg chloride. We will replace removed material with clean soil, cap with top soil, contour to match existing topography, and seed with a seed mixture that is consistent with the surrounding area.
- For areas "in-use" – 5 of the 6 sample locations meet Table 1 limits and meet the requirements of 19.15.29.13.A-C. Upon decommissioning of the tank battery the area will be reclaimed per 19.15.29.13.D-E.

  The 6$^{th}$ sample location is the 2017 Northwest (within berm), which exceeds Table 1 limits. As discussed above, the berm area is most likely within a former reserve pit dating back to the 1970's. Per 19.15.29.12.C.(2), we ask NMOCD to defer the restoration around the active tank battery and ask for a variance per 19.15.29.14 from fully delineating the berm area. As presented in our August 2018 report, Pride Energy will place a geosynthetic liner around the active tank battery, within the berm area, to:
    - Reduce future impairment to the environment from accidental releases.

- Prevent surface water infiltration – reducing the vertical migration of constituents of concern, and
- Prevent exposure to public health

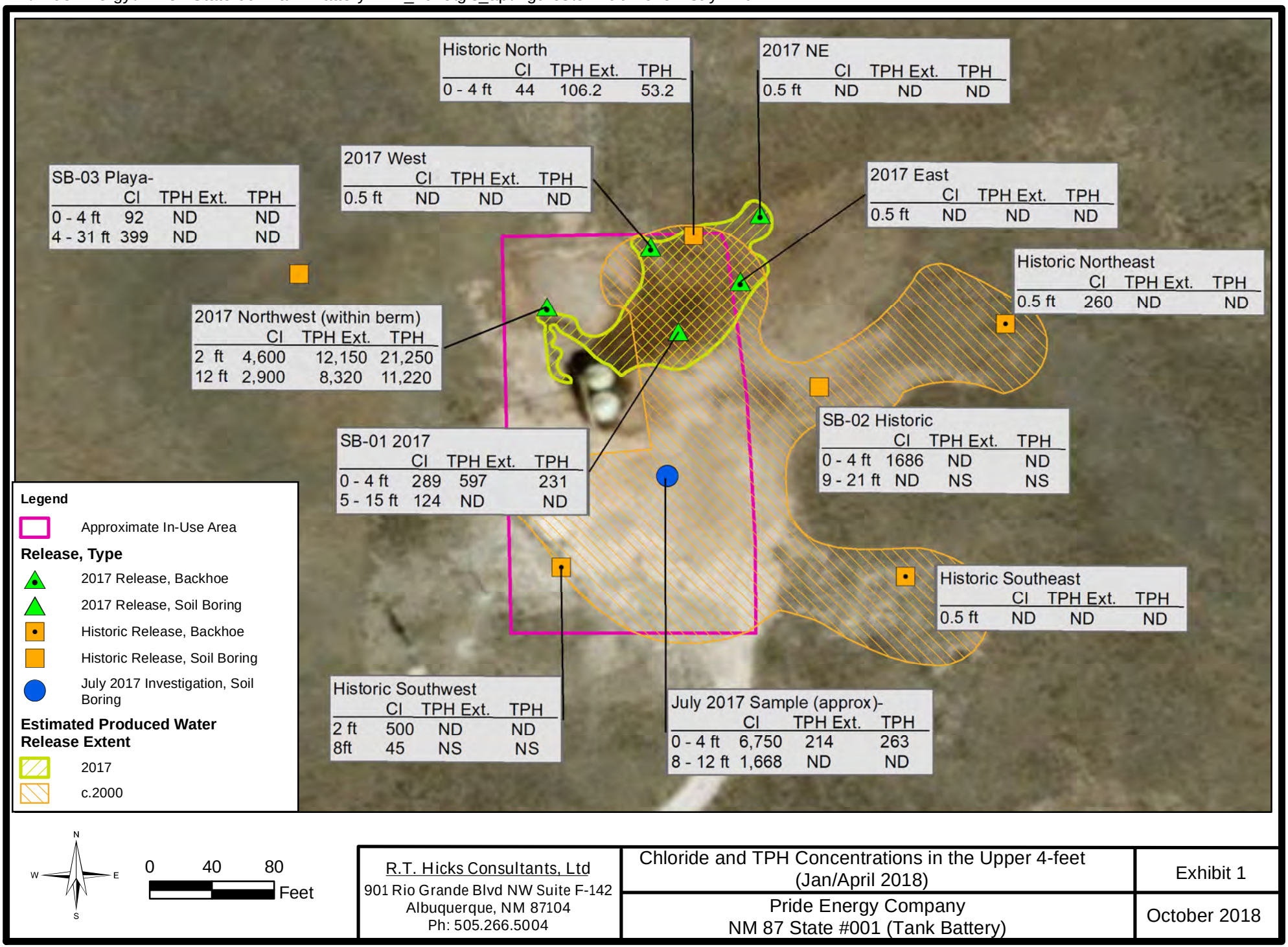
Please contact me at 970-570-9535 with any questions or comments.

Sincerely,
R.T. Hicks Consultants, Ltd.

Andrew Parker
Project Scientist

Copy: Hobbs NMOCD office – Oliva Yu (Olivia.Yu@state.nm.us)
NMOCD – Brad Billings (bradford.billings@state.nm.us)
NM SLO – Ryann Mann (rmann@slo.state.nm.us)

M:\Pride Energy\NM 87 State 001 Tank Battery 1RP_4625\gis_ap\Figures\exhibit 1 chemistry.mxd

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R.T. Hicks Consultants, Ltd
901 Rio Grande Blvd NW Suite F-142
Albuquerque, NM 87104
Ph: 505.266.5004


Chloride and TPH Concentrations in the Upper 4-feet (Jan/April 2018)

Exhibit 1

Pride Energy Company
NM 87 State #001 (Tank Battery)

October 2018

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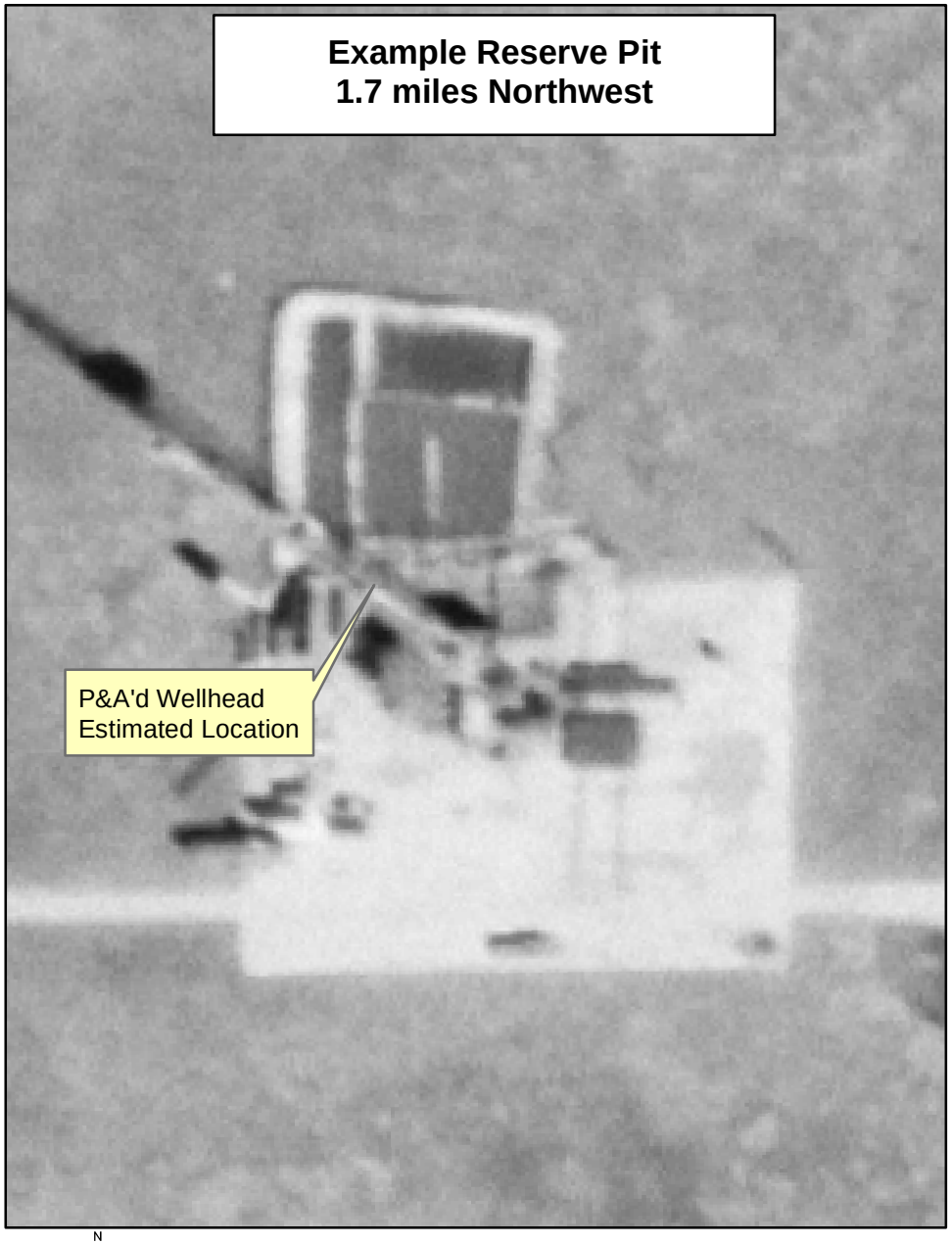


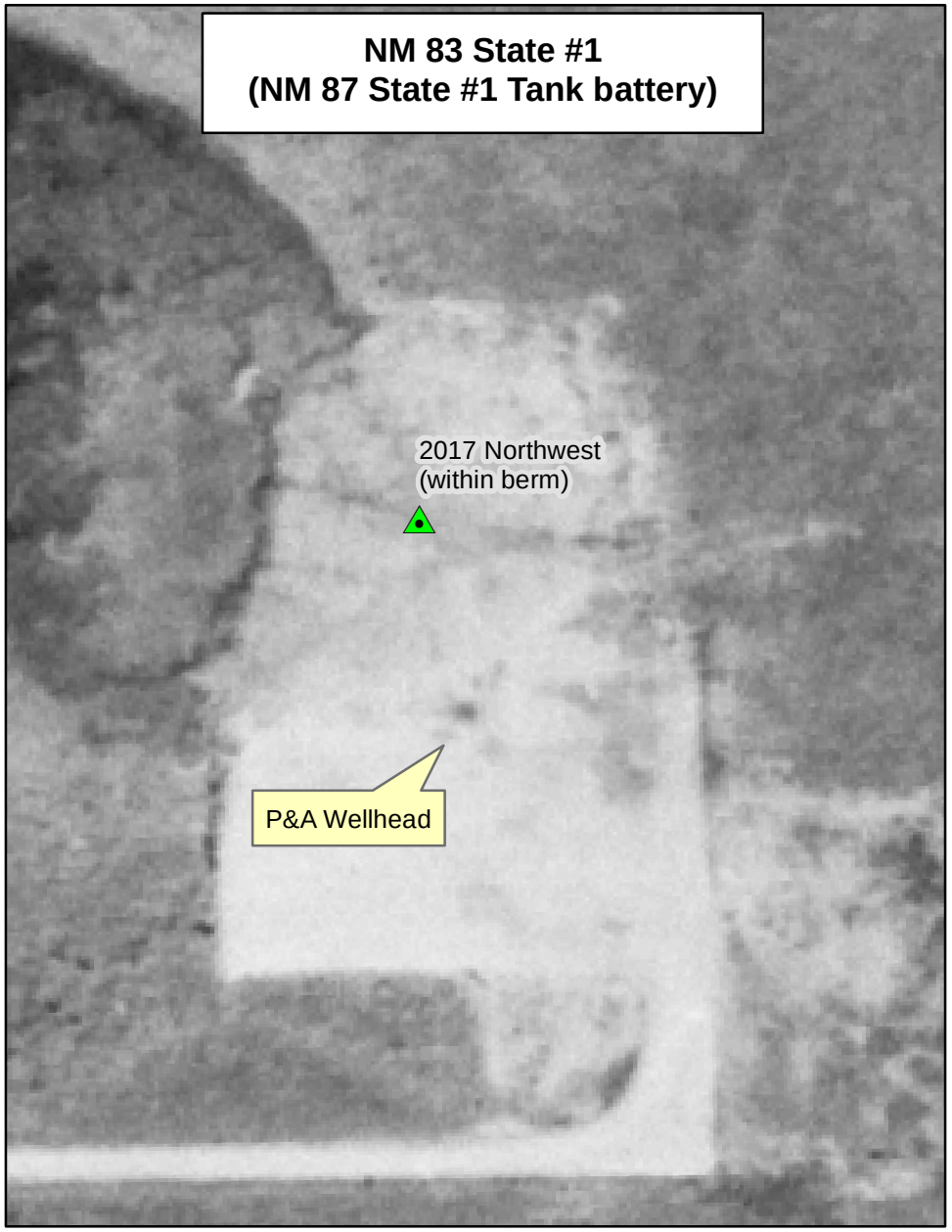


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Typical Reserve Pit Layout in 1970s.
Aerial Photo (Dec. 1971)

Exhibit 2

Pride Energy Company
NM 87 State #001 (Tank Battery)

October 2018