GW-263

Corrective Action Work Plan for Soil Impacted by C. Station CONTINUATION

Work Plan

YEAR(S): 2009

Alvarado Square Albuquerque, NM 87 158-2404 C V E D P 505.241.2031 F 505.241.2384 2009 JAN 30 PM 1 02 PNMResources.com



Sent Via email - Hard Copy Via Certified Mail

Carl J. Chavez, CHMM New Mexico Energy, Minerals & Natural Resources Dept. Oil Conservation Division, Environmental Bureau 1220 S. St. Francis Dr. Santa Fe, NM 87505

<u>RE: PNM Star Lake Natural Gas Compressor Station (GW-263) – Corrective Action Work Plan for</u> Soil Impacted by Compressor Oil; McKinley County, NM;

Dear Mr. Chavez,

With this letter, PNM is submitting the Corrective Action Closure Report for the historic release of compressor oil at the Star Lake Compressor Station for OCD review and approval. The attached Corrective Action Closure Report describes the site assessment conducted, remediation of petroleum contaminated soils, analytical results, and request for final closure of the former Clark Compressor Building release.

Initial notice of the release was provided via telephone on November 6, 2007. The initial C-141 report was submitted on November 9, 2007. With this submittal, an updated C-141 is attached. This update summarizes the site assessment and corrective action performed.

Please let me know if there are any questions. I may be contacted at (505) 697-3508 or by Cell (505) 249-0853 or via email at mark.sikelianos@nmgco.com.

Sincerely,

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Mark Sikelianos Senior Scientist

Enc.

Via Certified Mail

Cc: Claudette Horn, PNM Curtis Winner, PNM Kevin Lawrence, PNM DCC **Prepared For**

OIL CONSERVATION DIVISION

CORRECTIVE ACTION CLOSURE REPORT FORMER CLARK COMPRESSOR BUILDING STAR LAKE COMPRESSOR STATION

NW ¹/₄ of SEC. 34, T 20N, R6W McKinley County, New Mexico



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1.0 EXECUTIVE SUMMARY

During decommissioning activities of seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCRA standards), chloride (12 ppm non-detect), and TPH (15,000 and 75,000 ppm). The OCD ranking score for the site is 20.

Delphi, Inc ("DELPHI") was requested by Ms. Claudette Horn of PNM to conduct an Environmental Site Assessment ("ESA") in association with the retirement of seven (7) "Clark" Compressors at the Star Lake Compressor Station (Star Lake).

On March 18, 2008, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty-six (26) soil borings were performed with samples collected in four foot intervals. The investigation was conducted on the east and west sides of the former Clark Compressor building (see Figure 3).

At the time of the investigation, the building shell had been removed with the concrete foundation and compressors still present. The borings were strategically placed to delineate the horizontal and vertical extent of petroleum contamination. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: Total Petroleum Hydrocarbons (TPH) Gasoline Range Organics (GRO), Diesel Range Organics (DRO), and Motor Oil Range Organics (MRO) by EPA modified Method 8015B; ethylene glycol, by EPA modified Method 8015; PCBs, by EPA Method 8080; and Total RCRA Metals, by EPA Method 6010.

Subsequent excavation and remediation performed in October 2008 removed 1000 cubic yards of petroleum contaminated soil to an OCD approved land farm (T-n-T Environmental). Follow up vertical extent profiling was performed on December 11, 2008, to evaluate TPH contamination and potential threat to ground water. Four borings were performed at depths ranging from 17.5 to 21 feet below ground surface.

1.1 Summary of Data

The results of the initial investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination was primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for DRO, and in the 8300 ppm range for MRO. The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas.

Results for soil samples submitted for PCBs, and ethylene glycol were non-detect. Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations.

Vertical profile soil samples were collected and submitted for laboratory analysis of BTEX by EPA Method 8021, and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring, SB-3A, collected at 21-feet below ground surface, to contain TPH MRO of 360 mg/l. Although the TPH concentration is above the recommended remediation action level of 100 ppm, Delphi does not believe the residual contamination poses any future threat to health, surface/ground water, or the environment. TPH in the motor oil range is generally less soluble, not know to contain carcinogens, and is typically not a contaminant of concern.

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1.2 Conclusions

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination was primarily TPH in the diesel and motor oil range. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations. The highest concentrations reported were in the 1000 ppm range for DRO, and in the 8300 ppm range for MRO. The contamination appeared to be located at a depth of 7-8 feet below ground surface, and continued to at least 12 feet below ground surface in a few isolated areas where the former Clark compressor units five and six previously existed.

Subsequent excavation and remediation performed in October 2008 have removed the gross petroleum contamination. A total of 1000 cubic yards of contaminated soil were removed and hauled to a nearby OCD approved land farm (T-n-T Environmental). Copies of the trucking manifests are provided in the Appendices for reference. A C138 form was submitted to the land farm facility prior to hauling of any material.

Follow up vertical extent profiling was performed on December 11, 2008, to evaluate TPH contamination and potential threat to ground water. Four borings were performed at depths ranging from 17.5 to 21 feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing greater vertical depth. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021, and for TPH by EPA Method 8015B in the GRO, DRO, and MRO range. The results revealed one boring, SB-3A, collected at 21-feet below ground surface, to contain TPH MRO of 360 mg/l. Although the TPH concentration is above the recommended remediation action level of 100 ppm, Delphi does not believe the residual contamination poses any future threat to health, surface/ground water, or the environment. TPH in the motor oil range is generally less soluble, not know to contain carcinogens, and is typically not a contaminant of concern.

The primary constituents of health and ecological concern are small aromatic compounds (e.g., benzene, toluene, ethylbenzene, xylenes, etc.), and Naphthenic acids (captured by TPH-GRO/DRO). In general, the smaller the molecule, the more likely it is to volatilize; dissolve in water; be bioavailable; and to be biodegraded. Petroleum hydrocarbons greater than C28 Fraction of Petroleum such as MRO have a high molecular-weight, show low bioavailability, are of low toxicity, and show little mobility in the environment. In most circumstances, these constituents do not present a threat to public health, fresh water or the environment.

1.3 Recommendations

Based on the conclusions of this assessment, the limits of source contamination appear sufficiently defined both in the horizontal and vertical extent. Additional source removal of petroleum contaminated soils has occurred, including the removal of 1000 cubic yards of petroleum contaminated soil. PNM does not believe the residual contamination poses any future threat to health, surface/ground water, or the environment and recommends that the site be closed with no further action required.

2.0 BACKGROUND

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On November 13, 2007, an initial site visit was performed at Star Lake to make a preliminary assessment. The building surrounding the Clark compressors had been removed with the foundation and engines still in place. The existing foundation was measured to be approximately 15-feet wide and 140-feet in length. There appeared to be soil contamination surrounding the perimeter of the foundation, with the most visible areas along the southeastern side of the foundation where prior sampling revealed high concentrations of TPH. The soils showed slight petroleum hydrocarbon staining. Based upon the site observations and the previous sampling performed, a more detailed assessment of the area was recommended.

2.1 Location

Star Lake is located at an elevation of 6,640 feet above mean sea level in Section 34, Township 20N, Range 6W. The facility is approximately 11 miles west/northwest of Torreon, NM in McKinley County. Figure 1 is a 1:100,000 topographic map showing the regional topography and general site location of the Star Lake Facility. Figure 2 is a USGS 7.5 minute topographic map showing the location of the facility and localized topographical features. Figure 3, is an aerial photo/map of Star Lake with the soil boring locations and analytical data posted. Figure 4 is a footprint map of the buildings, soil boring locations, and analytical data posted.

2.2 Site History

The Star Lake Compressor Station (Star Lake) is a natural gas compressor station. The facility is owned by the Public Service Company of New Mexico and has been operating since approximately 1945. The facility was originally constructed in 1945 and consisted of two Clark RA6 compressor engines. Three additional Clark RA6 engines were installed, two in 1946 and one in 1949. In 1952, two additional Clark HRA6 engines were installed. PNM is in the process of retiring the seven (7) "Clark" internal gas combustion compression engines.

2.3 Chronology of Events

During decommissioning activities of seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCCRA standards), chloride (12ppm and non-detect), and TPH (15,000 and 75,000 ppm).

On November 7, 2007, a C-141 release form was submitted providing notification of the release by Ms. Claudette Horn, Environmental Manager with PNM, to Mr. Leonard Lowe, Environmental Engineer with the OCD.

On November 13, 2007, an initial site visit was performed at Star Lake to make a preliminary assessment. The building surrounding the Clark compressors had been removed with the foundation and engines still in place. The existing foundation was measured to be approximately 15-feet wide and 140-feet in length. There appeared to be soil contamination surrounding the perimeter of the foundation, with the most visible areas along the southeastern side of the foundation where prior sampling revealed high concentrations of TPH. The soils showed slight petroleum hydrocarbon staining.

On March 18, 2007, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty six (26) soil borings were performed with samples collected in clear polycarbonate

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liners in four-foot intervals. The investigation was conducted on the east and west sides of the former Clark Compressor building.

During the week of June 9th through June 17, the Clark compressor foundation was demolished and excavated. The foundation measuring 15' x 140' x 6' was removed. It was estimated that approximately 500 cubic yards of the concrete foundation were removed. At this time, further assessment of the soils beneath the foundation was performed. There was some evidence of discolored soils along the length of the trench. A front end loader was used to remove a 1- foot horizon of soil across the entire length of the excavation. The soils were staged on the northwest corner of the property. One sample was collected approximately 100 feet north of the Saturn building as a worst case sample to determine if the discolored soils were highly contaminated. An additional sample was collected 120 feet north of the Saturn building in the area defined by the geoprobe investigation as having the highest concentration. The sample was collected at a vertical depth of 12 feet below ground surface in the center of the trench. Based upon results of laboratory analysis and visual observation the contamination was not continuous and not present directly beneath the former slab. There appeared to be isolated areas of contamination along the side trenches of the former slab. Correspondence with Mr. Leonard Lowe addressed two items of concern. Soils staged on the north side of the facility should be covered in plastic, and two, that the T-n-T Environmental Land Farm facility can accept the contaminated soils. Both of these issues were resolved.

During the week of October 27 through October 31, 2008, contaminated soil was hauled to T-n-T Environmental Inc in Lindrith, NM. A track hoe excavator was used to perform additional source removal in the areas identified with high TPH concentrations in the soil. Clean backfill was brought in to the Star Lake facility to fill the void from the foundation and soil removal. Approximately 1000 yards of contaminated soil were hauled to T-n-T for disposal. Prior to hauling, a C138 form requesting approval to accept the waste was submitted to T-n-T. Each truck load was tested in the field for chlorides prior to acceptance. Copies of the commercial land farm haul tickets are provided as attachment in the Appendix C.

On December 11, 2008, additional vertical profiling was performed with a direct push geoprobe in the area previously identified as having petroleum contamination. Four borings were performed at depths ranging from 17.5 to 21-feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing the sample core from advancing. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021, and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring, SB-3A-@ 21' below ground surface, to contain TPH in the motor oil range (MRO) of 360 mg/l. Figure 3 shows the location of the soil borings with corresponding laboratory analysis, and Table 1 provides a summary of the laboratory analysis performed. Select photographs showing the remediation and vertical geoprobe profiling are provided as reference.

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3.0 SITE SETTINGS

3.1 Soils/Geology

The Facility is located within McKinley County, New Mexico. Soils data from the NRCS were acquired for McKinley County. The soils were identified as Calladito-Elias association (see Appendix C).

Description Category: SOI Map Unit: 12-Calladito-Elias association, 1 to 6 percent slopes

Calladito soils make up 55 percent of the map unit. The runoff class is negligible. The depth to a restrictive feature is greater than 60 inches. This soil is excessively drained. The slowest soil permeability within a depth of 60 inches is rapid. Available water capacity to a depth of 60 inches is low, and shrink swell potential is low. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 1 percent. The assigned Kw erodibility factor is .20. It is nonirrigated land capability subclass 7e. This component is not a hydric soil. Typical Profile: A - 0 to 2 inches; loamy fine sand; slightly alkaline. C1 - 2 to 26 inches; loamy fine sand; moderately alkaline. C2 - 26 to 65 inches; loamy fine sand; moderately alkaline.

Elias soils make up 30 percent of the map unit. The runoff class is medium. The depth to a restrictive feature is greater than 60 inches. This soil is well drained. The slowest soil permeability within a depth of 60 inches is slow. Available water capacity to a depth of 60 inches is moderate, and shrink swell potential is moderate. Annual flooding is none, and annual ponding is none. The minimum depth to a water table is greater than 6 feet. The maximum calcium carbonate equivalent within a depth of 40 inches is 15 percent. The assigned Kw erodibility factor is .32. It is non irrigated land capability subclass 7s. This component is not a hydric soil. Typical Profile: E - 0 to 1 inches; fine sandy loam; strongly alkaline. Btn1 - 1 to 3 inches; sandy clay loam; very strongly alkaline. Btn2 - 3 to10 inches; sandy clay loam; very strongly alkaline. Bkn1 - 10 to 18 inches; loamy fine sand; strongly alkaline. Bkn2 - 18 to 33 inches; sandy clay loam; moderately alkaline. Bkn3 - 33 to 65 inches; clay loam; very strongly alkaline.

According to the New Mexico Bureau of Geology and Minerals, the facility is located in (Kkf) Kirtland and Fruitland formations (campanion) –coal-bearing, primarily in the Fruitland. The soils encountered during vertical profiling included pale yellow fine grained sand, silty sandstone, with refusal occurring at approximately 20-feet below ground surface.

3.2 Hydrology

The regional hydraulic gradient in the alluvial aquifer is believed to follow the topography to the south. The localized groundwater gradient in the vicinity of the Property is also believed to be to the south. This may be altered or influenced by localized pumping of local wells. Depth to groundwater in the vicinity of the facility is reported to be approximately 100 feet below the ground surface (depth to ground water – ranking score 10). The area of concern is less than 200 feet from a private domestic water source (wellhead protection area < 200 feet from a private domestic water source 20). There are no washes or ephemeral streams located within 1000 feet of the compressor facility (distance to surface water body > 1000 horizontal feet – ranking score 0).

3.3 Potential Receptors

There are two water wells located on site along the north property boundary. Well #1 is a deeper well with depth to water reported at approximately 493 feet below ground surface (bgs), total depth at approximately 1470 feet bgs, and the pump set at approximately 834 feet bgs. The reported

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perforations or screened interval is believed to be from 775 to 785 feet bgs. Well # 2 is a shallow well with depth to water reported at approximately 122 feet bgs, total depth at approximately 180 feet bgs and the pump set at approximately 170 feet below ground surface. Both of these wells are believed to be located up gradient of the facility. Results of groundwater samples collected and submitted for laboratory analysis (1/15/2008) showed no petroleum hydrocarbon contamination. Copies of the well completion diagrams along with copies of the laboratory analysis performed on the shallow well, Star Lake #2 Water Well, are provided as attachment in Appendix D.

4.0 METHODS OF INVESTIGATION

4.1 GeoProbe Direct Push Investigation

In order to evaluate and delineate both the horizontal and vertical extent of the petroleum hydrocarbon contamination at the site, twenty-six (26) soil borings were performed utilizing a direct push hydraulic auger system. The borings (SB1 through SB26) were performed in and around the vicinity of the former Clark compressor building at shallow depths ranging from zero to sixteen feet below ground surface. The direct push geoprobe continuously advanced a clear polycarbonate core sampler into the undisturbed soil. Soil samples were collected in 4-foot intervals with field personnel providing screening and recording lithologic descriptions of the soils. In addition to these samples, two discrete samples were collected directly below the former "New" oil tank. The samples were submitted for laboratory analysis of TPH in the gasoline, diesel, and motor oil range (GRO, DRO, MRO) utilizing modified EPA Method 8015.

In all, thirty four (34) soil samples were collected and submitted for laboratory analysis. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: TPH GRO, DRO, and MRO by Method 8015B; ethylene glycol, modified Method 8015; PCBs, Method 8080; and Total RCRA Metals, by Method 6010.

4.2 Removal of Concrete Foundation

During the week of June 9^{th} thru June 17^{th} , the Clark compressor foundation was demolished and excavated. The foundation measured approximately 15' x 140' x 6' and was estimated to contain approximately 500 cubic yards of concrete. The concrete was broken up, removed from the site, and used for rip rap and storm water erosion prevention.

4.3 Follow-up Subsurface Investigation

Once the concrete from the foundation was removed, further assessment of the soils beneath the foundation was performed. There was visual evidence of discolored soils along the length of the trench. A front end loader was used to excavate a one foot horizon of soil across the entire length of the trench. The excavated soils were staged on the northwest corner of the property.

On December 11, 2008, additional vertical profiling was performed with a direct push geoprobe in the area previously identified as having petroleum contamination. Four borings were performed at depths ranging from 17.5 to 21-feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing further advancement of the core barrel. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021, and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring SB-3A, at a depth of 21-feet below ground surface to contain TPH MRO at 360 mg/l. Figure 3 shows the location of the soil borings with corresponding laboratory analysis, and Table 1 provides a summary of the laboratory analysis performed.

4.0 SAMPLING AND ANALYSIS RESULTS

4.1 Soil

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination was primarily TPH in the diesel range and motor oil range. The highest concentrations reported were in the 1000 ppm range for DRO, and in the 8300 ppm range for MRO. The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface. Results for soil samples submitted for PCBs, and ethylene glycol were non detect Results for soil samples submitted for metals analysis did not reveal any high concentrations, with the exception of barium which is still below maximum allowed TCLP concentrations. Soils field screened with a PID did not reveal any Volatile Organic compounds. The highest reading encountered was seven (7) ppm. The soils with visual hydrocarbon contamination observed were degraded petroleum hydrocarbons with low hydrocarbon odors.

The results from additional vertical profiling performed with a direct push geoprobe in the area identified as having petroleum contamination revealed the following: Four borings were performed at depths ranging from 17.5 to 21 feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing greater vertical depth. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021, and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring SB-3A at 21-feet below ground surface, to contain TPH in the MRO at a concentration of 360 mg/l. Figure 3 shows the location of the soil borings with corresponding laboratory analysis, and Table 1 provides a summary of the laboratory analysis performed. Select photographs showing the remediation and vertical profiling are provided in the Appendix as reference.

4.2 Groundwater

There are no known impacts or impairments to ground water. A shallow water well (~100 feet to groundwater) is located approximately 200 feet to the north of the former Clark building. This well was sampled and submitted for laboratory analysis (January 15, 2008, Pinnacle Laboratories). Results of the analysis did not reveal any hydrocarbon contamination.

5.0 REMEDIATION

5.1 Dig and Haul

PNM excavated all of the grossly contaminated soils within the former foundation trench. The horizon directly beneath the former foundation was over excavated at least one foot across the entire trench, including isolated areas of soil contamination along the northern portion of the trench. Soils were excavated and removed in the horizontal and vertical extent based upon laboratory results obtained during the geoprobe investigation. A scientist was present at the time of the remediation to supervise and direct field excavation activities.

During the week of October 27 through October 31, 2008, the contaminated soil was hauled to Tn-T Environmental Inc in Lindrith, NM. A track hoe excavator was used to perform additional source removal in the area identified with high TPH concentration in the soil. Clean backfill was trucked to the Star Lake facility to fill in the void from the concrete foundation and soil remediation. Approximately 1000 cubic yards of contaminated soil were hauled to T-n-T for disposal. Prior to hauling, a C138 form requesting approval to accept the waste was submitted to T-n-T. Each truck load was tested in the field for chlorides prior to acceptance. Copies of the commercial landfarm haul tickets are provided as attachment in Appendix C. R. W.

5.0 CONCLUSIONS AND RECOMENDATIONS

5.1 Conclusions

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination was primarily TPH in the diesel and motor oil range. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations. The highest concentrations reported were in the 1000 ppm range for DRO, and in the 8300 ppm range for MRO. The contamination appeared to be located at a depth of 7-8 feet below ground surface, and continued to at least 12 feet below ground surface in a few isolated areas where Clark units five and six previously existed.

Subsequent excavation and remediation performed in October 2008 have removed the gross petroleum contamination. A total of 1000 cubic yards of contaminated soil were removed and hauled to a nearby OCD approved land farm (T-n-T Environmental). Copies of the trucking manifests are provided in the Appendices for reference. A C138 form was submitted to the land farm facility prior to hauling of any material.

Follow up vertical extent profiling was performed on December 11, 2008, to evaluate TPH contamination and potential threat to ground water. Four borings were performed at depths ranging from 17.5 to 21 feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing greater vertical depth. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021 and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring, SB-3A, collected at 21-feet below ground surface, to contain TPH MRO of 360 mg/l. Although the TPH concentration is above the recommended remediation action level of 100 ppm, Delphi does not believe the residual contamination poses any future threat to health, surface/ground water, or the environment. TPH in the motor oil range is generally less soluble, not know to contain carcinogens, and is typically not a contaminant of concern.

The primary constituents of health and ecological concern are small aromatic compounds (e.g., benzene, toluene, ethylbenzene, xylenes, etc.), and Naphthenic acids (captured by TPH-GRO/DRO). In general, the smaller the molecule, the more likely it is to volatilize; dissolve in water; be bioavailable; and to be biodegraded. Petroleum hydrocarbons greater than C28 Fraction of Petroleum such as MRO have a high molecular-weight, show low bioavailability, are of low toxicity, and show little mobility in the environment. In most circumstances, these constituents do not present a threat to public health, fresh water or the environment.

5.2 Recommendations

Based on the conclusions of this assessment, the limits of source contamination appear sufficiently defined both in the horizontal and vertical extent. Additional source removal of petroleum contaminated soils has occurred, including the removal of 1000 cubic yards of petroleum contaminated soil. PNM does not believe the residual contamination poses any future threat to health, surface/ground water, or the environment and recommends that the site be closed with no further action required.

6.0 REFERENCES

USGS - 7.5 Minute Topographic Quadrangle of Star Lake, NM, 1989

DOQQ aerial photographs Star Lake, NM, 2005

Geologic Map of New Mexico, New Mexico Bureau of Geology and Mineral Resources, 2003, Scale 1:500,000

USDA - Soil Conservation Service and Forest Service, Soil Survey Area: McKinley County Area, New Mexico, McKinley County and Parts of Cibola and San Juan Counties Survey Area Data: Version 7, Jan 13, 2007

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Corrective Action Work Plan - Star Lake Compressor Station, Delphi, Inc., August 12, 2008

Guidelines for Remediation of Leaks, Spills and Releases (August 13, 1993), New Mexico Oil Conservation Division,

Office of State Engineers - WATERs Database.

FIGURES

SITE LOCATION MAP SITE TOPOGRAPHIC MAP SITE AERIAL PHOTO WITH SOIL BORINGS/ANALYTICAL SITE MAP WITH SOIL BORINGS/ANALYTICAL

Corrective Action Closure Report









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Table 1, Analytical Results Summary

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			8015B	8015B	8015B					
			ТРН	HdT	Н	8021B	8021B	8021B	8021B	
SAMPLE	Time	Depth	(DRO)	(MRO)	(GRO)	Benzene	Toluene	Ethylbenzene	Xylenes	Comment
SB1-A	11:30	17.5	<10	<50	<5.0	<0.05	<0.05	<0.05	0.10	Sand stone geoprobe refusal
SB2-A	11:55	17.5	<10	<50	<5.0	<0.05	<0.05	<0.05	0.10	Sand stone geoprobe refusal
SB3-A	12:23	21	52	360	<5.0	<0.05	<0.05	<0.05	0.10	Sand stone geoprobe refusal
SB4-A	12:50	19	<10	<50	<5.0	<0.05	<0.05	<0.05	0.10	Sand stone geoprobe refusal

Table 2 Star Lake Clark Compressor Building Soil Remediation Volume Approximations

Site	Length (ft)	Width (ft)	Area (SF)	Depth (ft)	Volume (cubic feet)	Volume (cubic yds)
Area of Investigation	170	65	11050	12		
Area of Excavation	150	30	4500	8	36000	1333.33
Area of Concrete Foundation	140	15	2100	6	12600	466.67
Volume of Contamination					23400	866.67
Additional soil removal 8-15 fbgs	20	40	800	6.5	5200	192.59
Approximate total of contaminated soil						1059.26
Note:						
Approximately 500 cubic yards of concrete	was removed a	and used loca	aly by BLM f	or rip rap an	d erosion prevension	
Approximately 1000 cubic yards of contam	inated soil was	removed an	d and transp	orted to TN	T / Schmitz Land Farm	s in Lindrith

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TABLE 3. STAR LAKE CONTAMINATED SOIL HAULED TO TNT

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· ·	l	10/28/2008	10/29/2008	10/30/2008	Total	yds/load
	Dirty	15	18	18	51	1020
	Clean	15	17	18	50	1000
Invoice TNT	Dirty	Clean	Chloride test			
4132	40		2			
4130	40	40	2	I (T
4133	38	38	2	l		
4134	40	40	2			
4131	40	40	2			
4128	40	40	2			
4129	40	40	2			
4135	20	20	1			
4139	20	40	1			
4138	20	40	1			
4141	40	40	2			
4142	40	40	2	· · · · · ·		
4148	40	40	2			
4140	38	40	2			
4145	40	40	2			
4144	40	40	2	1		
4161	40		2			
4156	40	20	2			
4153	40	20	2			
4154	40	20	2			
4152	40	20	2			
4151	40	20	2			
4155	38	20	2			
4157	40	20	2			
4150	40	20	2			
4146	40	40	2			
4143	20	40	1			
Total	994	818	50	Total	NMGRT	Grand Total
cost/yard	\$19	\$4	\$25		\$0.0606250	
Total	\$18,886	\$3,272	\$1,250	\$23,408	1419.11	\$24,827.1
 	ļ!					
	10	<u> </u>		<u></u>	O facto another a	
Note: Foutz Dro	ought in ⊥∠	loads ~240 y	/ards of clean	fill on 10/21/0	18 from another s	ource

APPENDIX A C141- RELEASE NOTIFICATION C138- REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE

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State of New Mexico Energy Minerals and Natural Resources

Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Submit 2 Copies to appropriate District Office in accordance with Rule 116 on back side of form

Release Notification and Corrective Action

		OPERATOR	Initial Report	Final Report		
Name of Company: PNM		Contact: Mark Sikelianos				
Address: Alvarado Square, Albuquerqu	e, NM 87158-2104	Telephone No.: 505-241-2024				
Facility Name: Star Lake Compressor S	tation	Facility Type: Natural Gas Compressor Station				
Surface Owner	Mineral Owr	ner	Lease No.			

LOCATION OF RELEASE	

Unit Letter	Section 34	Township 20N	Range 6W	Feet from the	North/South Line	Feet from the	East/West Line	County McKinley

Latitude:_35.924851____ Longitude:_-107.466736_____

NATURE OF RELEASE

Type of Release: Compressor Oil	Volume of Release: unknown	Volume Recovered: none
Source of Release: unknown	Date and Hour of Occurrence	Date and Hour of Discovery
	Historic release	
Was Immediate Notice Given?	If YES, To Whom?	
🗌 Yes 🗌 No 🛛 Not Required		
By Whom?	Date and Hour	
Was a Watercourse Reached?	If YES, Volume Impacting the Wate	ercourse.
🗌 Yes 🖾 No		
If a Watercourse was Impacted, Describe Fully.*		

Describe Cause of Problem and Remedial Action Taken.*

11/27/07 C-141 Submittal (this revised initial 11/9/07 submittal)

During decommissioning activities for seven compressor engines and ancillary equipment installed in the 1940s, discolored soil was encountered. Two soil samples were collected and analyzed for: PCBs (non-detect), BTEX (non-detect), metals (none exceeded RCRA standards), chloride (12ppm and non-detect), and TPH (15,000 and 75,000 ppm). The OCD ranking score for the site is 20.

Most ancillary equipment has been removed; however, the compressor engines and concrete pad are still in-place. Given the extensive nature of the decommissioning activities, PNM will conduct site assessment and associated remediation activities in conjunction with the decommissioning schedule. At this time, PNM plans to conduct the site assessment to determine extent of contamination over the next several weeks.

Per phone discussion between L. Lowe (OCD) and C. Horn (PNM) on November 7, 2007, upon completion of the site assessment, PNM will submit a Corrective Action plan to the OCD. As discussed, PNM plans to initiate necessary remediation activities after removal of the compressor engines and concrete pad.

Current Submittal - Site Investigation

On March 18, 2008, a Phase II Investigation was performed utilizing a direct push geoprobe. A total of twenty-six (26) soil borings were performed with samples collected in four foot intervals. The investigation was conducted on the east and west sides of the former Clark Compressor building.

At the time of the investigation, the building shell had been removed with the concrete foundation and compressors still present. The borings were strategically placed to delineate the horizontal and vertical extent of petroleum contamination. The soils were screened in the field visually, and with a photo ionization detector (PID). Based upon these indications samples were submitted for laboratory analysis of the following: Total Petroleum Hydrocarbons (TPH) gas, diesel, and motor oil range modified Method 8015; ethylene glycol, modified Method 8015; PCBs, Method 8080; Total RCRA Metals, Method 6010.

Describe Area Affected and Cleanup Action Taken.*

Current Submittal - Area Affected and Proposed Corrective Action (see attached Corrective Action Work Plan)

The results of the investigation revealed petroleum contamination on the northern portion of the former Clark Compressor building. The contamination is primarily TPH in the diesel and motor oil range. The highest concentrations reported were in the 1000 ppm range for diesel range organics (DRO), and in the 8300 ppm range for motor oil range organics (MRO). The contamination appears to be located at a depth of 7-8 feet below ground surface, and continues to at least 12 feet below ground surface in a few isolated areas. Results for soil samples submitted for PCBs, and ethylene glycol were non-detect. Results for soil samples submitted for metals analysis did not reveal any concentrations above maximum allowed TCLP concentrations.

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No. of Concern

During the week of June 9th through June 17, the Clark compressor foundation was demolished and excavated. The foundation measuring 15' x 140' x 6' was removed. It was estimated that approximately 467 cubic yards of concrete were removed. At this time, further assessment of the soils beneath the foundation was performed. There was some evidence of discolored soils along the length of the trench. A front end loader was used to remove a 1- foot horizon of soil across the entire length of the excavation. The soils were staged on the northwest corner of the property. One sample was collected approximately 100 feet north of the Saturn building as a worst case sample to determine if the discolored soils were highly contaminated. An additional sample was collected 120 feet north of the Saturn building in the area defined by the geoprobe investigation as having the highest concentration. The sample was collected at a vertical depth of 12 feet below ground surface in the center of the trench. Based upon results of laboratory analysis and visual observation the contamination was not continuous and not present directly beneath the former slab. There appeared to be isolated areas of contamination along the side trenches of the former slab.

PNM proposes to excavate all of the grossly contaminated soils within the former foundation trench and haul them to an OCD approved land farm. The horizon directly beneath the former foundation was over excavated at least one foot across the entire trench. There are a few isolated areas along the northern portion of the excavation that may require additional soil remediation. Soils will be excavated and removed in the horizontal and vertical extent based upon laboratory results obtained during the geoprobe investigation. Additional soil samples will likely be collected and submitted for laboratory analysis in the vertical extent once final clean up has been performed for confirmation purposes.

The horizontal extent of the soil contamination has been adequately defined with a geoprobe. The vertical extent of the soil contamination has also been defined with a geoprobe and subsequently with a back hoe. The extent of the vertical contamination is not continuous and was observed in isolated pockets. The total volume of contaminated soil to be removed is estimated to be approximately 600 cubic yards.

The contaminant of concern is primarily Total Petroleum Hydrocarbon (TPH) in the diesel and motor oil range. No gasoline range hydrocarbons i.e. BTEX have been detected, and soils monitored with a PID for VOCS have shown no volatile organic compounds. Based on the OCD ranking criteria, a target cleanup value of 100 ppm TPH has been established. A C-138 form requesting approval to accept solid waste shall be submitted to the land farm facility detailing the non-exempt waste.

Revised C141 - Submitted January 26, 2009

During the week of October 27 through October 31, 2008, contaminated soil was hauled to T-n-T Environmental Inc in Lindrith, NM. A track hoe excavator was used to perform additional source removal in the areas identified with high TPH concentrations in the soil. Clean backfill was brought in to the Star Lake facility to fill the void from the foundation and soil removal. Approximately 1000 yards of contaminated soil were hauled to T-n-T for disposal. Prior to hauling, a C138 form requesting approval to accept the waste was submitted to T-n-T. Each truck load was tested in the field for chlorides prior to acceptance. Copies of the commercial land farm haul tickets are provided as attachment in the Appendix of the closure report

On December 11, 2008, Delphi conducted additional vertical profiling with a direct push geoprobe in the area previously identified as having petroleum contamination. Four borings were performed at depths ranging from 17.5 to 21-feet below ground surface. In each of these boreholes a hard sand stone layer was encountered preventing the sample core from advancing. Samples of the broken sandstone were collected and submitted for laboratory analysis for BTEX by EPA Method 8021, and for TPH by EPA Method 8015B for GRO, DRO, and MRO. The results revealed one boring, SB-3A-@ 21' below ground surface, to contain TPH in the motor oil range (MRO) of 360 mg/l. Figure 3 shows the location of the soil borings with corresponding laboratory analysis, and Table 1 provides a summary of the laboratory analysis performed. Select photographs showing the remediation and vertical geoprobe profiling are provided as reference.

I hereby certify that the information given above is true and complete to the best of my knowledge and understand that pursuant to NMOCD rules and regulations all operators are required to report and/or file certain release notifications and perform corrective actions for releases which may endanger public health or the environment. The acceptance of a C-141 report by the NMOCD marked as "Final Report" does not relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that pose a threat to ground water, surface water, human health or the environment. In addition, NMOCD acceptance of a C-141 report does not relieve the operator of responsibility for compliance with any other federal, state, or local laws and/or regulations.

AND SAI	OIL CONS	SERVATION	DIVISION
Signature: / UW ANC	_		
Printed Name: Mark Sikelianos	Approved by District Supervise	or:	<u> </u>
Title: Senior Scientist	Approval Date:	Expiration I	Date:
E-mail Address: mark.sikelianos@pnmresources.com	Conditions of Approval:		Attached
Date: January 26, 2009 Phone: 505 241-2024			

* Attach Additional Sheets If Necessary

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Oil Conservation Division 1220 South St. Francis Dr. Santa Fe, NM 87505 Form C-138 Revised March 12, 2007

*Surface Waste Management Facility Operator and Generator shall maintain and make this documentation available for Division inspection.

REQUEST FOR APPROVAL TO ACCEPT SOLID WASTE				
1. Generator Name and Addres	s:			
PNM, Alvarado Square, Albuquerque, NM 87158-2104				
2. Originating Site:				
PNM Star Lake Compressor S	tation			
3. Location of Material (Street Address, City, State or ULSTR):				
NW ¼ of Section 34, T20N, R	6W	•		
4. Source and Description of W Petroleum contaminated soil from maintaining the compressors. The constituents were found in laborato	aste: natural gas compressor engines. T contaminant is Total Petroleum H ry analysis. Metals concentrations	he petroleum is primarily oil and lube oil used f ydrocarbons (TPH) in the higher range. No BTE s and RCRA characteristics are "Non-Hazardou	for servicing and EX or volatile s."	
Estimated Volume 800 (ye	$\frac{1^3}{\text{bbls}}$ Known Volume (to be a	entered by the operator at the end of the haul)	yd ³ / bbls	
5. GE	NERATOR CERTIFICATION	STATEMENT OF WASTE STATUS		
I, Claudette Horn (4490'	, representative or authorized age	ent for PNM	do hereby	
regulatory determination, the above described waste is: (Check the appropriate classification)				
RCRA Exempt: Oil field exempt waste. <i>Operator</i>	□ RCRA Exempt: Oil field wastes generated from oil and gas exploration and production operations and are not mixed with non- exempt waste. Operator Use Only: Waste Acceptance Frequency □ Monthly □ Weekly □ Per Load			
RCRA Non-Exempt: Oil the characteristics established in R subpart D, as amended. The for the appropriate items)	ield waste which is non-hazardou CRA regulations, 40 CFR 261.21 Illowing documentation is attache	s that does not exceed the minimum standards f -261.24, or listed hazardous waste as defined in d to demonstrate the above-described waste is n	or waste hazardous by 40 CFR, part 261, ion-hazardous. (Check	
□ MSDS Information ⊠ RCR/	A Hazardous Waste Analysis	Process Knowledge 🛛 Other (Provide descr	iption in Box 4)	
GENERATOR 19.15.	36.15 WASTE TESTING CERT	TFICATION STATEMENT FOR LANDFA	RMS	
I,	, representative for ld waste have been subjected to the specific requirements applicable to tached to demonstrate the above-of <i>Ranch (10/27/08), paint filter an</i>	do hereby ne paint filter test and tested for chloride conten- o landfarms pursuant to Section 15 of 19.15.36 lescribed waste conform to the requirements of <i>d chloride tests will be performed and documen</i>	certify that t and that the samples NMAC. The results Section 15 of the dupon arrival at	
5. Transporter:				
Foutz & Bursum Construction				
OCD Permitted Surface Waste Ma	nagement Facility			
Name and Facility Permit #:				
Address of Facility:				
Method of Treatment and/or Disp	osal:			
Evaporation	Injection 🗌 Treating Plant	🗌 Landfarm 🔲 Landfill 🔲 Other		
Waste Acceptance Status:				
• ·····	APPROVED	DENIED (Must Be Maintained As	Permanent Record)	
PRINT NAME:	TITLI	E: DAT	E:	
SIGNATURE:	ŗ	ELEPHONE NO.:		
Surface Waste Manager	nent Facility Authorized Agent			

APPENDIX B PHOTOGRAPHS

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Photograph Number 1: View of remediation along east wall of former Clark building.



Photograph Number 2: View to the north of remediation along east wall of former Clark building.



Photograph Number 3: View to the northeast of remediation along east wall of former Clark building



Photograph Number 4: View of east wall of former Clark building.



Photograph Number 5: View of contaminated soil staged west of the former Clark building.



Photograph Number 6: View of contaminated soil staged west of the former Clark building.



Photograph Number 7: View of remediation along the west wall of the former Clark building.



Photograph Number 8: View of remediation along the west wall of the former Clark building.



Photograph Number 9: View of remediation along the west wall of the former Clark building.



Photograph Number 10: View of remediation along the west wall of the former Clark building at a depth of 15-feet below ground surface.



Photograph Number 11: View of contaminated soil staged for transport to TNT Land Farm.



Photograph Number 12: View of the former Clark building in process of backfilling.


Photograph Number 13: View of the former Clark building in process of backfilling.



Photograph Number 14: View to the south of geo probe direct push unit performing soil borings.



Photograph Number 15: View to the east of geo probe direct push unit performing soil borings



Photograph Number 16: View to the south of geo probe direct push unit performing soil borings.



Photograph Number 17: View to the south of geo probe direct push unit performing soil borings.



Photograph Number 18: View to the west of geo probe direct push unit performing soil borings



Photograph Number 19: View of sandstone encountered at approximately 17.5 feet below ground surface. The sand stone became harder at depth with geo probe refusal ranging from 17.5 to 21 feet below ground surface.



Photograph Number 20: View of polycarbonate sample core.



Photograph Number 21: View of polycarbonate sample core.



Photograph Number 22: View of polycarbonate sample core. Sandstone refusal occurred at approximately 18 to 21 feet below ground surface.

APPENDIX C LABORATORY ANALYSIS SOILS

Star Lake Compressor Facility

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COVER LETTER

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Wednesday, December 17, 2008

Claudette Horn PNM Alvarado Square MS 2104 Albuquerque, NM 87158

TEL: (505) 241-2019 FAX (505) 241-4306

RE: Star Lake

Order No.: 0812244

Dear Claudette Horn:

Hall Environmental Analysis Laboratory, Inc. received 4 sample(s) on 12/11/2008 for the analyses presented in the following report.

These were analyzed according to EPA procedures or equivalent. Below is a list of our accreditations. To access our accredited tests please go to www.hallenvironmental.com or the state specific web sites.

Reporting limits are determined by EPA methodology. No determination of compounds below these (denoted by the ND or < sign) has been made.

Please don't hesitate to contact HEAL for any additional information or clarifications.

Sincerely,

Andy Eleeman, Basiness Manager Nancy McDuffie, Laboratory Manager

NM Lab # NM9425 AZ license # AZ0682 ORELAP Lab # NM100001 Texas Lab# T104704424-08-TX



4901 Hawkins NE Suite D Albuquerque, NM 87109 505.345.3975 Fax 505.345.4107 www.hallenvironmental.com

CLIENT:	PNM			Client Sample II	: SB-1A@17	
Lab Order:	0812244			Collection Date	e: 12/11/2008	11:30:00 AM
Project:	Star Lake			Date Received	I: 12/11/2008	
Lab ID:	0812244-01			Matrix	: SOIL	•
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANGE	ORGANICS				Analyst: SCC
Diesel Range C	Irganics (DRO)	' ND	10	mg/Kg	1	12/16/2008
Motor Oil Range	e Organics (MRO)	ND	50	mg/Kg	1	12/16/2008
Surr: DNOP	• •	81.5	61.7-135	%REC	. 1	12/16/2008
EPA METHOD	8015B: GASOLINE RAN	IGE				Analyst: DAM
Gasoline Range	Organics (GRO)	ND	5.0	mg/Kg	1.	12/16/2008 1:27:04 AM
Surr: BFB		92.9	58.8-123	%REC	1	12/16/2008 1:27:04 AM
EPA METHOD	8021B: VOLATILES					Analyst: DAM
· Methyl tert-buty	l ether (MTBE)	ND	0.10	mg/Kg	1	12/16/2008 1:27:04 AM
Benzene		ND	0.050	mg/Kg	· 1	12/16/2008 1:27:04 AM
Toluene		ND	0.050	mg/Kg	1	12/16/2008 1:27:04 AM
Ethylbenzene		ND	0.050	mg/Kg	1	12/16/2008 1:27:04 AM
Xylenes, Total		ND	0.10	mg/Kg	1	12/16/2008 1:27:04 AM
Surr: 4-Brome	ofluorobenzene	92.9	66.8-139	%REC	1	12/16/2008 1:27:04 AM

Date: 17-Dec-08

Qualifiers:

*

Value exceeds Maximum Contaminant Level

E Estimated value

- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level

RL Reporting Limit

Page 1 of 4

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CLIENT:	PNM			Client Sample ID:	SB-2A@17	7.5'
Lab Order:	0812244			Collection Date:	12/11/2008	11:55:00 AM
Project:	Star Lake	-		Date Received:	12/11/2008	
Lab ID:	0812244-02			Matrix:	SOIL	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANGE	ORGANICS				Analyst: SCC
Diesel Range C	Drganics (DRO)	ND	- 10	mg/Kg	1	12/16/2008
Motor Oil Rang	e Organics (MRO)	ND	50	mg/Kg	1	12/16/2008
Surr: DNOP		63.8	61.7-135	%REC	1	12/16/2008
EPA METHOD	8015B: GASOLINE RANG	GE		•		Analyst: DAM
Gasoline Range	e Organics (GRO)	ND	5.0	í mg/Kg	1	12/16/2008 1:57:29 AM
Surr: BFB		92.3	58.8-123	%REC	1	12/16/2008 1:57:29 AM
EPA METHOD	8021B: VOLATILES					Analyst: DAM
Methyl tert-buty	l ether (MTBE)	ND	0.10	mg/Kg	1	12/16/2008 1:57:29 AM
Benzene		ND	0.050	mg/Kg	1	12/16/2008 1:57:29 AM
Toluene		ND	0.050	mg/Kg	1 1	12/16/2008 1:57:29 AM
Ethylbenzene		ND	0.050	mg/Kg	1	12/16/2008 1:57:29 AM
Xylenes, Total		ND	0.10	mg/Kg	1	12/16/2008 1:57:29 AM
Surr: 4-Brom	ofluorobenzene	92.7	66.8-139	%REC	1	12/16/2008 1:57:29 AM

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Date: 17-Dec-08

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level
- RL Reporting Limit

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Page 2 of 4

	· · · · · · · · · · · · · · · · · · ·					
CLIENT:	PNM		· · · · · · · · · · · · · · · · · · ·	Client Sample I	D: SB-3A@	21'
Lab Order:	0812244			Collection Da	te: 12/11/200	08 12:23:00 PM
Project:	Star Lake	•		Date Receive	ed: 12/11/200)8
Lab ID:	0812244-03			Matr	ix: SOIL	
Analyses		Result	PQL	Qual Units	DF	Date Analyzed
EPA METHOD	8015B: DIESEL RANGI	E ORGANICS			· ·	Analyst: SCC
Diesel Range C	Organics (DRO)	52	10	mg/Kg	1	12/16/2008
Motor Oil Range	e Organics (MRO)	360	50	mg/Kg	1	12/16/2008
Sun: DNOP		94.6	61.7-135	%REC	1	12/16/2008
EPA METHOD	8015B: GASOLINE RAI	NGE				Analyst: DAM
Gasoline Range	e Organics (GRO)	ND	5.0	mg/Kg	1	12/16/2008 2:27:42 AM
Surr: BFB		· 90.8	58.8-123	%REC	1	12/16/2008 2:27:42 AM
EPA METHOD	8021B: VOLATILES					Analyst: DAM
Methyl tert-buty	l ether (MTBE)	ND	0.10	mg/Kg	1	12/16/2008 2:27:42 AM
Benzene		ND	0.050	mg/Kg	1	12/16/2008 2:27:42 AM
Toluene		ND	0.050	mg/Kg	1	12/16/2008 2:27:42 AM
Ethylbenzene		ND	0.050	mg/Kg	. 1	12/16/2008 2:27:42 AM
Xylenes, Total		ND	0.10	mg/Kg	1	12/16/2008 2:27:42 AM
Surr: 4-Brom	ofluorobenzene	90.2	66.8-139	%REC	1	12/16/2008 2:27:42 AM

Date: 17-Dec-08

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Qualifiers:

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- Value exceeds Maximum Contaminant Level
- Estimated value
- Ε J Analyte detected below quantitation limits
- Not Detected at the Reporting Limit ND
- S Spike recovery outside accepted recovery limits
- В Analyte detected in the associated Method Blank
- Holding times for preparation or analysis exceeded Н
- MCL Maximum Contaminant Level

Reporting Limit RL

CLIENT:	PNM			Client Samp	le ID:	SB-4A@19	,)
Lab Order:	0812244			Collection	Date:	12/11/2008	12:50:00 PM
Project:	Star Lake			Date Rec	eived:	12/11/2008	
Lab ID:	0812244-04			М	atrix:	SOIL	
Analyses		Result	PQL	Qual Units		DF	Date Analyzed
EPA METHOD 8	015B: DIESEL RANGE	ORGANICS					Analyst: SCC
Diesel Range Or	rganics (DRO)	ND	10	mg/Kg		1	12/16/2008
Motor Oil Range	Organics (MRO)	ND	50	mg/Kg		1	12/16/2008
Surr: DNOP		80.8	61.7-135	%REC		1	12/16/2008
EPA METHOD 8	015B: GASOLINE RANG	θE					Analyst: DAM
Gasoline Range	Organics (GRO)	ND	5.0	mg/Kg		. 1.	12/16/2008 2:58:10 AM
Surr: BFB		94.7	58.8-123	%REC		1	12/16/2008 2:58:10 AM
EPA METHOD 8	021B: VOLATILES						Analyst: DAM
Methyl tert-butyl	ether (MTBE)	ND	0.10	mg/Kg		1	12/16/2008 2:58:10 AM
Benzene		ND	0.050	mg/Kg		1	12/16/2008 2:58:10 AM
Toluene		ND	0.050	mg/Kg		1	12/16/2008 2:58:10 AM
Ethylbenzene		ND	0.050	mg/Kg		1	12/16/2008 2:58:10 AM
Xylenes, Total		ND	0.10	mg/Kg		1	12/16/2008 2:58:10 AM
Surr: 4-Bromo	fluorobenzene	95.1	66.8-139	%REC		1	12/16/2008 2:58:10 AM

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Date: 17-Dec-08

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- E Estimated value
- J Analyte detected below quantitation limits
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits
- B Analyte detected in the associated Method Blank
- H Holding times for preparation or analysis exceeded
- MCL Maximum Contaminant Level

RL Reporting Limit

Page 4 of 4

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QA/QC SUMMARY REPORT

						W	ork Order:	0812244
Result	Units	PQL	%Rec	LowLimit H	ighLimit	%RPD	RPDLimit	Qual
iesel Range	Organics MBLK			Batch ID:	17840	Analysis Dat	e:	12/14/2008
ND ND	. mg/Kg mg/Kg LCS	10 50		Batch ID:	17840	Analysis Dat	e:	12/14/2008
49.43	mg/Kg LCSD	10	98.9	64.6 Batch ID:	116 17840	Analysis Dat	e:	12/14/2008
52.02	mg/Kg	10	104	64.6	116	5.11	17.4	
asoline Rar	nge MSD			Batch ID:	17846	Analysis Dat	e: 12/15/2	008 5:50:42 PM
27.89	mg/Kg MS	5.0	112	69.5 Batch ID:	120 17846	4.66 Analysis Dat	11.6 e: 12/15/2	008 5:20:17 PM
29.22	mg/Kg	5.0	117	69.5	120			
	Result niesel Range ND 49.43 52.02 nasoline Ran 27.89 29.22	ResultUnitsbiesel Range Organics MBLKNDmg/Kg LCSNDmg/Kg LCS49.43mg/Kg LCSD52.02mg/Kg52.02mg/Kg27.89mg/Kg MS29.22mg/Kg	ResultUnitsPQLbiesel Range Organics MBLKNDmg/Kg10NDmg/Kg50LCSLCS49.43mg/Kg10LCSD52.02mg/Kg1052.02mg/Kg10biasoline RangeMSD27.89mg/Kg5.0MS29.22mg/Kg5.0	Result Units PQL %Rec biesel Range Organics MBLK ND mg/Kg 10 ND mg/Kg 50 LCS 200 200 52.02 mg/Kg 10 MSD 10 104 Sasoline Range MSD 27.89 29.22 mg/Kg 5.0 112	ResultUnitsPQL%RecLowLimitHviesel Range OrganicsMBLKBatch ID:NDmg/Kg10NDmg/Kg50LCSBatch ID:49.43mg/Kg1098.964.6LCSDBatch ID:52.02mg/Kg101010464.6asoline RangeMSD27.89mg/Kg5.0MSBatch ID:29.22mg/Kg5.011769.5	Result Units PQL %Rec LowLimit HighLimit biesel Range Organics MBLK Batch ID: 17840 ND mg/Kg 10 10 17840 ND mg/Kg 50 Eatch ID: 17840 49.43 mg/Kg 10 98.9 64.6 116 LCS Batch ID: 17840 52.02 mg/Kg 10 104 64.6 116 Sasoline Range MSD Batch ID: 17846 116 27.89 mg/Kg 5.0 112 69.5 120 MS 5.0 117 69.5 120 29.22 mg/Kg 5.0 117 69.5 120	Result Units PQL %Rec LowLimit HighLimit %RPD niesel Range Organics MBLK Batch ID: 17840 Analysis Dat ND mg/Kg 10 10 10 10 10 ND mg/Kg 50 Eatch ID: 17840 Analysis Dat 49.43 mg/Kg 10 98.9 64.6 116 116 LCS Batch ID: 17840 Analysis Dat 10 104 64.6 116 49.43 mg/Kg 10 104 64.6 116 5.11 fasoline Range MSD Batch ID: 17846 Analysis Dat 27.89 mg/Kg 5.0 112 69.5 120 4.66 MS Batch ID: 17846 Analysis Dat 29.22 mg/Kg 5.0 117 69.5 120	Result Units PQL %Rec LowLimit HighLimit %RPD RPDLimit niesel Range Organics MBLK Batch ID: 17840 Analysis Date: ND ND mg/Kg 10 Batch ID: 17840 Analysis Date: 10 ND mg/Kg 50 Eatch ID: 17840 Analysis Date: 10 49.43 mg/Kg 10 98.9 64.6 116 112 17.4 52.02 mg/Kg 10 104 64.5 116 5.11 17.4 Fasoline Range MSD Batch ID: 17846 Analysis Date: 12/15/2 27.89 mg/Kg 5.0 112 69.5 120 4.66 11.6 MS Batch ID: 17846 Analysis Date: 12/15/2 12/15/2 29.22 mg/Kg 5.0 117 69.5 120 4.66 11.6

Qualifiers:

- E Estimated value
- J Analyte detected below quantitation limits
- R RPD outside accepted recovery limits

- H Holding times for preparation or analysis exceeded
- ND Not Detected at the Reporting Limit
- S Spike recovery outside accepted recovery limits

Page 1

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Sample Receipt Checklist											
Client Name PNM			Date Receive	d:	12/11/2008						
Work Order Number 0812244	\mathbf{i}	. (Received by	TLS	/å 1						
Checklist completed by:	\$	12111 Date	Sample ID la	bels checked	by: <u>U</u> Initials	·					
Matrix	Carrier name <u>C</u>	lient drop-of	Щ								
Shipping container/cooler in good condition?	Y	es 🗹	No 🗌	Not Present							
Custody seals intact on shipping container/cooler?	Y	es 🗌	No 🗔	Not Present	Not Shipped						
Custody seals intact on sample bottles?	Y	es 🗹	No 🗔	N/A							
Chain of custody present?	Y	es 🗹	No 🗔								
Chain of custody signed when relinquished and rec	eived? Y	es 🗹	No 🗌								
Chain of custody agrees with sample labels?	Y	es 🗹	No 🗌								
Samples in proper container/bottle?	Y	es 🗹	No 🗌								
Sample containers intact?	Y	es 🔽	No 🗌								
Sufficient sample volume for indicated test?	Y	es 🗹	No 🗔								
All samples received within holding time?	Ye	es 🗹 .	No 🗌								
Water - VOA vials have zero headspace?	vo VOA vials submitte	ed 🗹	Yes	No 🗔							
Water - Preservation labels on bottle and cap match	n? Ye	əs 🗋	No 🗔	N/A 🔽							
Water - pH acceptable upon receipt?	Ye	əs 🗌	No 🗔	N/A 🗹							
Container/Temp Blank temperature?		16°	<6° C Acceptabl	e							
COMMENTS:			If given sufficient	time to cool.							
Client contacted Da	te contacted:		Perso	on contacted							
Contacted by: Rep	garding:	. ··			• ••• ••• ••• ••• ••• ••• ••• ••• •••						
Comments:											
· · · · · · · · · · · · · · · · · · ·											
Corrective Action											

	HALL ENVIRONMENTAL Analysts I Ardratory		www.rjanenvindinuenda.com tawkins NE - Albuquergue, NM 87109	05-345-3975 Fax 505-345-4107	Analysis:Request	(*OS		1) (1) (1) (1) (1) (1) (1) (1) (1) (1) (. 814 1 1 504. 1 804. 1 818 1	PDH (Method EDB (Method BJ10 (PNA o BJ10 (PNA 0 BJ10 (PNA AOV) 8081 Pesticid AOV (Semi-V AOV) 8081 AOV AOV (Semi-V AOV) 8081 AOV (Semi-V AOV (Semi-V AOV) 8081 AOV (Semi-V AOV												ub-contracted data will be clearly notated on the analytical report.
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Turn-Around T	□ Standard	Project Name:	Ster	Project #:	Clert	Project Manag	Clarket	Sampler: N	Ondoe: ***	Container Type and #	j-Uoz	2071-1	20 4-1	2011-1						Received by:	3	ontracted to other acc
Chain-of-Custody Record	Client: PNM		Mailing Address: AIV aredo Square		Phone #: 241 - 2019	email or Fax#: Claudutte. horn a	QA/QC Package: T. W M V Sear Ces I Con	□ Other	🗆 EDD (Type)	Date Time Matrix Sample Request ID	2/1/00 1130 Soil SB-1A Q17.5'	14 Les 155 501 5B-2A. 17.5'	2/10/08 1223 Sor1 50-3 A. 21'	10/08 1250 5051 58-4A2 19'						Date: Time: Relinquished by: 11108 1555 Vat Date: Time: Relinuished by:		If necessary, samples submitted to Hall Environmental may be subco

APPENDIX D LABORATORY ANALYSIS GROUND WATER

Corrective Action Closure Report

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Pinnacle Lab ID number 80 March 10, 2008

801050

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METRIC CORPORATION P.O. BOX 1591 LOS LUNAS, NM 87031

Project Name STARLAKE #3 Project Number (NONE)

Attention: DON BRIGGS

On 1/15/2008 Pinnacle Laboratories Inc., (ADHS License No. AZ0643), received a request to analyze **aqueous** samples. The samples were analyzed with EPA methodology or equivalent methods. The results of these analyses and the quality control data, which follow each set of analyses, are enclosed.

At the request of the client, the analysis for chromium was tested at a second laboratory. The new analysis determined that no chromium was present at MDL. It is believed that the original data was in error.

EPA Method 8015 was performed by Pinnacle Laboratories, Inc. (PLI).

Total Coliform analyses was performed by International Lubrication and Fuel Consultants, Inc. (ILFC), Rio Rancho, NM.

EPA Method 8015 Ethylene Glycol analyses was performed by TestAmerica, Inc. (TA), Pensacola, FL.

RA226/RA228 and Gross A/B analyses were performed by General Engineering Laboratories LLC (GEL), Charleston, SC.

Additional chromium analyses was perfored by Apex Labs, Tigard, OR.

All remaining analyses were performed by Flowers Chemical Laboratories, Inc. (FCL), Altamonte Springs, FL.

If you have any questions or comments, please do not hesitate to contact us at (505) 344-3777.

H. Mitchell Rubenstein, Ph.D. General Manager, Pinnacle Laboratories, Inc.

MR: jt

Enclosure

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Albuquerque, NM 87107 505.344.3777 505.344.4413 FAX 877.PIN.1998 TOLL FREE www.pinnaclelabs.org www.pinnaclelabsonline.com



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CLIENT	: METRIC CORPORATION	PINNACLE ID	: 801050
PROJECT #	: (NONE)	DATE RECEIVED	: 1/15/2008
PROJECT NAME	STARLAKE #3	REPORT DATE	: 3/10/2008
PINNACLE			DATE
ID #	CLIENT DESCRIPTION	MATRIX	COLLECTED
801050 - 01	STARLAKE #2	AQUEOUS	1/15/2008

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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8015B GR	0						
CLIENT		: METRIC CORP	ORATION		P	PINNACLE I.D. : 801050			
PROJECT #	#	: (NONE)				ANALYST	: ARM		
PROJECT I	NAME	: STARLAKE #3							
SAMPLE				DATE	DATE	DATE	DIL.		
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR		
01	STARLAKE #2		AQUEOUS	01/15/08	NA	01/16/08	1		
PARAMETE	ER	DET. LIMIT	UN	ITS	STARLAKE #2				
FUEL HYDF	ROCARBONS	100	UG	€/L	< 100				
HYDROCA	RBON RANGE				C6-C10				
HYDROCA	RBONS QUANTI	TATED USING			GASOLINE				
SURROGA	TE:								
BROMOFLU	JOROBENZENE	(%)			102				
SURROGA	TE LIMITS	(80 - 120)							

CHEMIST NOTES: N/A

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GAS CHROMATOGRAPHY RESULTS METHOD BLANK

TEST BLANK I.D. CLIENT PROJECT #	: EPA 8015B GRO : 011608B : METRIC CORPORATION : (NONE)		PINNACLE I.D. DATE EXTRACTED DATE ANALYZED SAMPLE MATRIX	: 801050 : NA : 01/16/08 : AQUEOUS
PROJECT NAME	: STARLAKE #3		ANALYST	: ARM
PARAMETER		UNITS		
FUEL HYDROCARBO HYDROCARBON RAI HYDROCARBONS QI	NS NGE JANTITATED USING	UG/L	<100 C6-C1 GASOLI	0 NE
SURROGATE: BROMOFLUOROBEN SURROGATE LIMITS	IZENE (%) (80 - 120)		104	

CHEMIST NOTES: N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST	: EPA 8015B (GRO			PINNACLE	I.D. PACTED	:	801050 NA	
CLIENT	: METRIC CO	RPORATION	N		DATE ANAL	YZED	:	01/16/08	
PROJECT #	: (NONE)				SAMPLE M	ATRIX	:	AQUEOUS	
PROJECT NAME	: STARLAKE	#3			UNITS		:	UG/L	
	BLANK	CONC	SPIKED	%	DUP	DUP		REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
FUEL HYDROCARBONS	<100	1000	1080	108	1030	103	5	(70 - 130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES:

% Recovery =

N/A

(Spike Sample Result - Sample Result)

----- X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

----- X 100

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GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST SAMPLE ID CLIENT	: EPA 8015B (: 801050-01 : METRIC CO	GRO RPORATION	N		PINNACLE DATE EXTR DATE ANAL	I.D. RACTED LYZED	:	801050 NA 01/16/08	
PROJECT #	: (NONE)				SAMPLE M	ATRIX	:	AQUEOUS	
PROJECT NAME	: STARLAKE	#3			UNITS		:	UG/L	
	SAMPLE	CONC	SPIKED	%	DUP	DUP		REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
FUEL HYDROCARBONS	<100	1000	1070	107	1040	104	3	(70-130)	20
HYDROCARBON RANGE		C6-C10							

HYDROCARBONS QUANTITATED USING GASOLINE

CHEMIST NOTES: N/A

% Recovery =

(Spike Sample Result - Sample Result)

----- X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

Average Result

----- X 100

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GAS CHROMATOGRAPHY RESULTS

TEST		: EPA 8015 M	ODIFIED (DIR	ECT INJECT)			
CLIENT		: METRIC COI	RPORATION		PI	NNACLE I.D. :	801050	
PROJECT	#	: (NONE)				ANALYST :	STH	
PROJECT	NAME	: STARLAKE #	# 3					
SAMPLE				DATE	DATE	DATE	DIL.	
ID. #	CLIENT I.D.		MATRIX	SAMPLED	EXTRACTED	ANALYZED	FACTOR	
01	STARLAKE #2		AQUEOUS	1/15/2008	1/21/2008	1/22/2008	1	
PARAMETE	ER	DET. LIMIT	UN	lITS	STARLAKE #2			
FUEL HYDR	ROCARBONS, C10-C22	1.0	M	G/L	< 1.0			
FUEL HYD	ROCARBONS, C22-C36	1.0	M	G/L	< 1.0			
SURROGA	TE:							
O-TERPHE	NYL (%)				97			

(70-130)

O-TERPHENYL (%) SURROGATE LIMITS

CHEMIST NOTES: N/A

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GAS CHROMATOGRAPHY RESULTS METHOD BLANK

TEST BLANK I.D. CLIENT PROJECT # PROJECT NAME	: EPA 8015 MODIFIED (DIREC : 012108FW : METRIC CORPORATION : (NONE) : STARLAKE #3	T INJECT) PINN DATE DATE SAMF ANAL	ACLE I.D. EXTRACTED ANALYZED PLE MATRIX YST	: 801050 : 1/21/2008 : 1/22/2008 : AQUEOUS	
PARAMETER		UNITS			
FUEL HYDROCARBON	IS, C10-C22	MG/L	< 1.0		
FUEL HYDROCARBON	IS, C22-C36	MG/L	< 1.0		
SURROGATE:					

(70 - 130)

O-TERPHENYL (%) SURROGATE LIMITS

CHEMIST NOTES:

N/A

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GAS CHROMATOGRAPHY QUALITY CONTROL LCS/LCSD

TEST				`				001050	
IESI	. EPA 6010 M	טטורובט (ט	IRECT INJECT)	PINNAGLE	.D.	• •	001030	
BATCH ID	: 012108FW				DATE EXRA	ACTED	:	1/21/2008	
CLIENT	: METRIC CO	RPORATIO	N		DATE ANAL	YZED	:	1/22/2008	
PROJECT #	: (NONE)				SAMPLE M	ATRIX	:	AQUEOUS	
PROJECT NAME	: STARLAKE	#3			UNITS		:	MG/L	
	BLANK	CONC	SPIKED	%	DUP	DUP		REC	RPD
PARAMETER	RESULT	SPIKE	BLANK	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
FUEL HYDROCARBONS	<1.0	200	178	89	173	87	3	(75-125)	20
HYDROCARBON RANGE		C10-C32							

HYDROCARBONS QUANTITATED USING DIESEL FUEL

CHEMIST NOTES: N/A

% Recovery =

(Spike Sample Result - Sample Result)

----- X 100

Spike Concentration

(Sample Result - Duplicate Result) ----- X 100

RPD (Relative Percent Difference) =

Average Result

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GAS CHROMATOGRAPHY QUALITY CONTROL MS/MSD

TEST SAMPLE ID CLIENT PROJECT # PROJECT NAME	: EPA 8015 M : 801050-01 : METRIC COI : (NONE) : STARLAKE #	DDIFIED (DI RPORATION	RECT INJECT)	PINNACLE I DATE EXRA DATE ANAL SAMPLE MA UNITS	I.D. ACTED AYZED ATRIX	:	801050 1/21/2008 1/22/2008 AQUEOUS MG/L	
	SAMPLE	CONC	SPIKED	%	DUP	DUP		REC	RPD
PARAMETER	RESULT	SPIKE	SAMPLE	REC	SPIKE	% REC	RPD	LIMITS	LIMITS
FUEL HYDROCARBONS	<1.0	200	169	85	173	87	2	(70-130)	20
HYDROCARBONS QUANT	ITATED USING	DIESEL FUI	EL						
CHEMIST NOTES: N/A									

(Spike Sample Result - Sample Result)

----- X 100

Spike Concentration

(Sample Result - Duplicate Result)

RPD (Relative Percent Difference) =

% Recovery =

Average Result

_____ X 100

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Water Microbiology Report

WSS Name Not Given	WSS Code Not Given
Submitter Code Not Given	Collected By Not Given
Sample LocationStarlake #2 /801050-01	Date Collected 1/15/08
(address or physical)	Time Collected 10:00
City, Town, Village Not Given	Type of System Not Given
County Not Given	Disinfected Not Given
Reason for Sampling Not Given	Residual (mg/L) N/A
ILFC, Inc Batch Number 1602	Date Received 1/16/08
ILFC, Inc Sample Number 7885	Time Received 8:45 AM
Date Cultured 1/16/08 Date Con	npleted 1/17/08 Analyst MU
Time Cultured 9:00 AM Time Co	mpleted 8:58 AM Test Method SM9223
Results	· · · · · · · · · · · · · · · · · · ·

d Analyst Signature

These laboratory results are intended to be helpful and informative. They are based on our experience, current industry testing procedures, proper sampling procedure and information provided with the sample, which we believe to be reliable. We cannot assume responsibility for any loss or accident that may result from the use of the information given here. This report shall not be reproduced except in full, without the written approval of our laboratory.

Thursday, January 17, 2008 9:06:54 AM

Absent

Absent

Total Coliforms

E coli

NM Dept. of Health Certification No. 0502

Mail: P.O. Box15212 • Rio Rancho, NM 87174 Deliveries: 521 Quantum Road • Rio Rancho, NM 87124 Phone: (505) 892-1666 -or- (800) 237-4532 Fax: (505) 892-9601 Visit our website: http://www.ilfcinc.com E-mail: ilfcinc@ilfcinc.com

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Certificate of Analysis Report for

PINL001 Pinnacle Labs, INC

Client SDG: 801050 GEL Work Order: 200990

The Qualifiers in this report are defined as follows:

- * A quality control analyte recovery is outside of specified acceptance criteria
- ** Analyte is a surrogate compound
- U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.
- ND The analyte concentration is not detected above the detection limit.

The above sample is reported on an "as received" basis.

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless qualified on the Certificate of Analysis.

This data report has been prepared and reviewed in accordance with GEL Laboratories LLC standard operating procedures. Please direct any questions to your Project Manager, Joanne Harley.

mHan Reviewed by

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Certificate of Analysis

Company : Pinnacle Labs, Inc Address : 2709D Pan American Freeway NE Albuquerque, New Mexico 87107

Report Date: January 25, 2008

Contact: Mr. Mitch Rubenstein Project: Radiochemistry Drinking Water

Client Sample ID: Starlake#2/801050-01 Project: Client ID: PINL00504 200990001 Drinking Water (Potable) 15–JAN–08 PINL001 Sample ID: Matrix: Collect Date: 16-JAN-08 **Receive Date:** Collector: Client Qualifier Parameter Result Uncertainty DL TPU RL Units **DF** Analyst Date **Time Batch Rad Gas Flow Proportional Counting** Gross Alpha/Beta in Drinking Water EPA 900.0 Alpha 7.26 +/--5.69 8.95 +/-5.90 3.00 HAK 01/24/08 1931 72105: U pCi/L в Beta U 5.92 +/-4.97 8.20 +/-5.04 4.00 pCi/L Radium-228 in Drinking Water EPA 904.0 Radium-228 KSD1 01/21/08 1309 718841 U 0.241 +/-0.304 0.517 +/-0.307 1.00 pCi/L Rad Radium-226 Radium-226 in Drinking Water EPA 903.1 (De-emanati Radium-226 0.921 +/-0.463 0.415 +/-0.481 1.00 pCi/L DXM 01/24/08 1230 718799 2

Method	Description	
1	EPA 900.0	
2	EPA 900.0	
3	EPA 900.0	
4	EPA 900.0	
5	EPA 904.0	
6	EPA 903.1	

Surrogate/Tracer recovery	Test	Recovery%	Acceptable Limits	
Barium Carrier	Radium-228 in Drinking Water EF	99	(25%-125%)	
Yttrium Carrier	Radium228 in Drinking Water EF	77	(25%-125%)	

Notes:

The Qualifiers in this report are defined as follows :

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

A The TIC is a suspected aldol-condensation product

B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.

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Certificate of Analysis

Parameter		Qualifier	Result	Uncertainty	DL	TPU	RL	Units	DF Analyst Date	Time Batch
		Client Sam Sample ID:	ple ID:		Starlake#2 20099000	2/80105001 1		Project: Client ID:	PINL00504 PINL001	
	Project:	Radiochemis	try Drink	ing Water		•				
	Contact:	Albuquerque Mr. Mitch R	e, New Me ubenstein	xico 87107]	Report Date: January 25	, 2008
	Company : Address :	Pinnacle Lat 2709D Pan A	os, Inc American I	Freeway NE	5					x

BD Results are either below the MDC or tracer recovery is low

C Analyte has been confirmed by GC/MS analysis

D Results are reported from a diluted aliquot of the sample

H Analytical holding time was exceeded

J Value is estimated

M M if above MDC and less than LLD

N/A RPD or %Recovery limits do not apply.

ND Analyte concentration is not detected above the detection limit

NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

R Sample results are rejected

U Analyte was analyzed for, but not detected above the MDL, MDA, or LOD.

UI Gamma Spectroscopy-Uncertain identification

X Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

Y QC Samples were not spiked with this compound

^ RPD of sample and duplicate evaluated using +/-RL. Concentrations are <5X the RL. Qualifier Not Applicable for Radiochemistry.

h Preparation or preservation holding time was exceeded

The above sample is reported on an "as received" basis.

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Client :	Pinnacle La	ibs. Inc		<u>QC</u>	C Su	<u>mmary</u>			Report l	Date: January 25, 2008	1
	2709D Pan	American	Freeway NE							Fage 101 5	
Contact:	Albuquerqu Mr. Mitch I	1e, New M Rubensteir	exico 1								
Workorder:	200990										
'armname			NOM	Sample	Qual	QC	Units	RPD%	REC%	6 Range Anlst	Date Time
tad Gas Flow atch 7	18841										
QC120149809 Ladium-228	4 200990001	DUP	U	0.241	U	-0.0359	pCi/	L 0		N/A KSD1	01/21/0813:09
			TPU:	+/-0.304		+/-0.360					
QC120149809 tadium-228	6 LCS		8.16 Uncert:			8.21 +/-1.19	pCi/	L	101	(80%-120%)	01/21/0813:09
00120149809	3 MB		TPU:			+/-1.78					
4adium-228	5 ME		Uncert:		U	0.407 +/-0.302	pCi/J	L			01/21/0813:09
OC120149809	5 200990001	MS	TPU:			+/-0.309					
adium-228			24.5 U Uncert:	0.241 +/-0.304		25.8 +/-3.69	pCi/l	L	105	(70%-130%)	01/21/0813:09
atch 7	21053		TPU:	+/-0.307		+/-5.56					
QC1201502626	5 200990001	DUP									
lpha			U Uncert:	7.26 +/-5.69	U	5.57 +/-5.23	pCi/I	0		N/AHAKB	01/24/0819:40
ieta			U U Uncert:	+/-5.90 5.92 +/-4.97	U	+/-5.40 4.60 +/-4.59	pCi/I	. 0		N/A	
001201502620			TPU:	+/-5.04		+/-4.63					
,lpha			579 Uncert:			615 +/-60.2	pCi/I	-	106	(80%-120%)	01/24/0815:12
eta			TPU: 1640 Uncert:			+/-151 1650 +/-71.5	pCi/I	-	100	(80%-120%)	
QC1201502625 lpha	б МВ		TPU:		U	+/-227	pCi/I	_			01/24/0819:41
-			Uncert: TPU:			+/-2.77 +/-2.77	•				
eta			Uncert:		U	2.84 +/-3.67 +/-3.69	pCi/I				
QC1201502627 lpha	200990001	MS	11600 U Uncert:	7.26 +/-5.69		9210 +/~1090	pCi/L		80	(70%-130%)	01/24/0815:12
eta			TPU: 32900 U Uncert:	+/-5.90 5.92 +/-4.97		+/-2390 35600 +/-1500	pCi/L		108	(70%-130%)	

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QC Summary

Workorder:	200990									Page 2 of 3	
'armname			NOM	Sample	Qual	QC	Units	RPD%	REC%	Range Anlst	Date Time
tad Gas Flow latch 72	1053							k			
QC1201502628	200990001	MSD	TPU:	+/-5.04		+/-4870					
Alpha			11600 U	7.26		9420	pCi/I	Ŀ 2	81	(0%-20%)	01/24/0815:12
			Uncert:	+/-5.69		+/-1090					
			TPU:	+/-5.90		+/-2420					
Beta			32900 U	5.92		34700	pCi/I	L 2	106	(0%-20%)	
			Uncert:	+/-4.97		+/-1470					
			TPU:	+/-5.04		+/-4750					
tad Ra-226 atch 71	8799										
OC1201497955	200990001	DUP									
tadium-226				0.921	υ	0.431	pCi/L	73		(0% - 100%) DXM2	01/24/0812:30
			Uncert:	+/-0.463		+/-0.447	•				
			TPU:	+/-0.481		+/-0.451					
QC1201497957	LCS										
tadium-226			40.1			32.1	pCi/L		80	(80%-120%)	
			Uncert:			+/-2.55					
			TPU:			+/-5.34					
QC1201497954	MB										
Ladium-226			~ .		U	0.316	pCi/L				
			Uncert:			+/-0.326					
0.01001.000.00			TPU:			+/-0.329					
QC1201497956	200990001	MS	100	0.021		107	0.4			(000/ 1000/)	
.aurum=220			120 Uncorte	0.921		107	pCi/L		88	(80%-120%)	
			Uncert:	T/-0.403		+/-8.23					
			TPU:	+/-0.481		+/-17.1					

Notes:

The Qualifiers in this report are defined as follows:

** Analyte is a surrogate compound

< Result is less than value reported

> Result is greater than value reported

- A The TIC is a suspected aldol-condensation product
- B For General Chemistry and Organic analysis the target analyte was detected in the associated blank.
- BD Results are either below the MDC or tracer recovery is low
- C Analyte has been confirmed by GC/MS analysis
- D Results are reported from a diluted aliquot of the sample
- H Analytical holding time was exceeded
- J Value is estimated
- M M if above MDC and less than LLD
- N/A RPD or %Recovery limits do not apply.
- ND Analyte concentration is not detected above the detection limit
- NJ Consult Case Narrative, Data Summary package, or Project Manager concerning this qualifier

R. Sample results are rejected

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GEL LABORATORIES LLC 2040 Savage Road Charleston SC 29407 - (843) 556-8171 - www.gel.com

QC Summary

	order: 200990							Page :	3 of 3		
Parm	lame	NOM	Sample Qual	QC	Units	RPD%	REC%	Range	Anlst	Date	Time
U	Analyte was analyzed for, I	out not detected above	the MDL, MDA, or LC	D.							
UI	Gamma SpectroscopyUne	certain identification									
х	Consult Case Narrative, Da	ta Summary package,	or Project Manager con	cerning thi	s qualifie	:					
Y	QC Samples were not spike	d with this compound	i								
^	RPD of sample and duplica	te evaluated using +/-	RL. Concentrations are	<5X the R	L. Qualif	ier Not App	licable for R	adiochemi	stry.		
h	Preparation or preservation	holding time was exc	eeded								
N/A in ** Ind	dicates that spike recovery lin icates analyte is a surrogate co Relative Persont Difference (I	nits do not apply when ompound. PD) obtained from th	n sample concentration of sample duplicate (DI	exceeds spi	ke conc. t ated again	by a factor o	f 4 or more. otence criteri	a when the	1		

requirements of the NELAC standard unless qualified on the QC Summary.

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Radiochemistry Case Narrative Pinnacle Labs, INC (PINL) SDG 801050

Method/Analysis Information

Product:Gross Alpha/Beta in Drinking Water EPA 900.0Analytical Method:EPA 900.0Analytical Batch Number:721053

Sample ID	Client ID
200990001	Starlake#2/801050-01
1201502625	Method Blank (MB)
1201502626	200990001(Starlake#2/801050-01) Sample Duplicate (DUP)
1201502627	200990001(Starlake#2/801050-01) Matrix Spike (MS)
1201502628	200990001(Starlake#2/801050-01) Matrix Spike Duplicate (MSD)
1201502629	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-001 REV# 11.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met. The initial Calibration was performed in June 2007. The discrimination settings are calibrated in beta discriminating mode to reduce beta to alpha crosstalk.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

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Designated QC

The following sample was used for QC: 200990001 (Starlake#2/801050-01). The QC was from PINL work order 200990.

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Samples were reprepped due to low/high recovery.

Chemical Recoveries

All chemical recoveries meet the required acceptance limits for this sample set.

Gross Alpha/Beta Preparation Information

None of the samples have been flamed.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments

Samples 1201502625 (MB), 1201502626 (Starlake#2/801050-01) and 200990001 (Starlake#2/801050-01) did not meet the alpha required detection limit due to low sample volume. No more volume could be used due to not exceeding the maximum net weight limit. The samples counted for 500 minutes. Samples 1201502625 (MB), 1201502626 (Starlake#2/801050-01) and 200990001 (Starlake#2/801050-01) did not meet the beta required detection limit due to low sample volume. No more volume could be used due to not exceeding the maximum net weight limit. The samples counted for 500 minutes.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

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Product:

Radium-228 in Drinking Water EPA 904.0

Analytical Method: EPA 904.0

Analytical Batch Number: 718841

Sample ID	Client ID
200990001	Starlake#2/801050-01
1201498093	Method Blank (MB)
1201498094	200990001(Starlake#2/801050-01) Sample Duplicate (DUP)
1201498095	200990001(Starlake#2/801050-01) Matrix Spike (MS)
1201498096	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-030 REV# 10.

Calibration Information:

Calibration Information

All initial and continuing calibration requirements have been met. The initial Calibration was performed in February 2007.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 200990001 (Starlake#2/801050-01). The QC was from PINL work order 200990.

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

None of the samples in this sample set required reprep or reanalysis.

Chemical Recoveries

All chemical recoveries meet the required acceptance limits for this sample set.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Method/Analysis Information

Product:	Radium-226 in Drinking Water EPA 903.1 (De-emanati
Analytical Method:	EPA 903.1
Analytical Batch Number:	718799

Sample ID	Client ID
200990001	Starlake#2/801050-01
1201497954	Method Blank (MB)
1201497955	200990001(Starlake#2/801050-01) Sample Duplicate (DUP)
1201497956	200990001(Starlake#2/801050-01) Matrix Spike (MS)
1201497957	Laboratory Control Sample (LCS)

The sample in this SDG was analyzed on an "as received" basis.

SOP Reference

Procedure for preparation, analysis and reporting of analytical data are controlled by GEL Laboratories LLC as Standard Operating Procedure (SOP). The data discussed in this narrative has been analyzed in accordance with GL-RAD-A-028 REV# 8.

Calibration Information:

Calibration Information

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All initial and continuing calibration requirements have been met. The initial Calibrations were performed in January 2007, February 2007, June 2007, December 2007 and January 2008.

Standards Information

Standard solution(s) for these analyses are NIST traceable and used before the expiration date(s).

Sample Geometry

All counting sources were prepared in the same geometry as the calibration standards.

Quality Control (QC) Information:

Blank Information

The blank volume is representative of the sample volume in this batch.

Designated QC

The following sample was used for QC: 200990001 (Starlake#2/801050-01). The QC was from PINL work order 200990.

QC Information

All of the QC samples met the required acceptance limits.

Technical Information:

Holding Time

All sample procedures for this sample set were performed within the required holding time.

Preparation Information

All preparation criteria have been met for these analyses.

Sample Re-prep/Re-analysis

Samples were degassed and recounted due to low matrix spike recovery.

Miscellaneous Information:

NCR Documentation

Nonconformance reports are generated to document any procedural anomalies that may deviate from referenced SOP or contractual documents. A nonconformance report (NCR) was not generated for this SDG.

Additional Comments

Additional comments were not required for this sample set.

Qualifier information

Manual qualifiers were not required.

Certification Statement

Where the analytical method has been performed under NELAP certification, the analysis has met all of the requirements of the NELAC standard unless otherwise noted in the analytical case narrative.

Review Validation:

GEL requires all analytical data to be verified by a qualified data validator. In addition, all data designated for CLP or CLP-like packaging will receive a third level validation upon completion of the data package.

The following data validator verified the information presented in this case narrative:

Reviewer/Date:

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State	Certification							
Alaska	UST-062							
Arizona	AZ0668							
Arkansas	88-0651							
CLIA	42D0904046							
California	01151CA							
Colorado	GenEngLabs							
Connecticut	PH-0169							
Dept. of Navy	NFESC 413							
EPA	WG-15J							
Florida/NELAP	E87156							
Georgia	E87156 (FL/NELAP)							
Hawaii	N/A							
Idaho	N/A							
Illinois	200029							
Indiana	C-SC-01							
Kansas	E-10332							
Kentucky	90129							
Louisiana	03046							
Maryland	270							
Massachusetts	M-SC012							
Michigan	9903							
Nevada	SC12							
New Jersey	SC002							
New Mexico	FL NELAP E87156							
New York	11501							
North Carolina	233							
North Carolina Drinking W	45709							
North Dakota	R-158							
Oklahoma	9904							
Pennsylvania	68-00485							
South Carolina	10120001/10585001/10120002							
Tennessee	02934							
Texas NELAP	T104704235-07-TX							
U.S. Dept. of Agriculture	S-52597							
US Army Corps of Engineer	N/A							
Utah	8037697376 GEL							
Vermont	VT87156							
Virginia	00151							
Washington	C1641							

List of current GEL Certifications as of 25 January 2008

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

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Albuquerque, NM-87107	Project Manager:	Jacinta Tenorio	02/25/08 14:09
2709-D Pan American Freeway, NE	Project Number:	801050	Reported:
Pinnacle Laboratories, Inc.	Project:	МС	

SAMPLE INFORMATION										
Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received						
Starlake #2 / 801050-01	A802173-01	Water	01/15/08 10:00	02/19/08 10:00						

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

DRAFT REPORT, DATA SUBJECT TO CHANGE

Page 2 of 7

12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax 100 m

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Pinnacle Laboratories, Inc. 2709-D Pan American Freeway, NE Albuquerque, NM 87107			Reported: 02/25/08 14:09										
Total Metals by EPA 200.8 (ICPMS)													
Analyte	Result	MDL	Reporting Limit	Units	Dilution	Date Analyzed	Method	Notes					
tarlake #2 / 801050-01 (A802173-01	1)		Matrix: Water										
	ND		1.00	ug/L	1	02/20/08 11:02	EFA 200.8						
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DRAFT REPORT

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Pinnacle Laboratories, Inc.	Project: MC	
2709-D Pan American Freeway, NE	Project Number: 801050	Reported:
Albuquerque, NM 87107	Project Manager: Jacinta Tenorio	02/25/08 14:09
	QUALITY CONTROL (QC) SAMPLE RESULTS	

DRAFT: Total Metals by EPA 200.8 (ICPMS)												
Analyte	Result	MDL	Reporting Limit	Units	Dil.	Spike Amount	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 8020155 - EPA 3015							Wat	ter				
Blank (8020155-BLK1)	Analyzed: 02/19/08 17:26											
EPA 200.8												
Chromium	ND		1.00	ug/L	1							
LCS (8020155-BS1)						Analyzed: ()2/19/08 17	:29				
EPA 200.8			· · · · ·									
Chromium	116		1.00	ug/L	1	111		104	85-115%			

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

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	SAMPLE PREPARATION D	FORMATION	 <u></u>	
Albuquerque NM 87107	Project Manager: Jacinta 1	enorio		02/25/08 14:09
2709-D Pan American Freeway, NE	Project Number: 801050			Reported:
Pinnacle Laboratories, Inc.	Project: MC			

Apex Laboratories

	Total Metals by EPA 200.8 (ICPMS)											
Lab Number	Matrix	Method	Sampled	Prepared	Sample Initial/Final	Default Initial/Final	RL Prep Factor					
EPA 3015												
Batch: 8020155 A802173-01	Water	EPA 200.8	01/15/08 10:00	02/19/08 10:25	45mL/50mL	45mL/50mL	1.00					

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

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Page 5 of 7

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax

Pinnacle Laboratories, Inc.	Projec	t: MC	
2709-D Pan American Freeway, NE	Project Numb	r: 801050	Reported:
Albuquerque, NM 87107	Project Manage	r: Jacinta Tenorio	02/25/08 14:09

Notes and Definitions

Qualifiers:

Notes and Conventions:

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

MDL If MDL is not listed, data has been evaluated to the Method Reporting Limit only.

 Batch
 Unless specifically stated, all analyses include full Batch QC, including Sample Duplicates, Matrix Spikes and/or Matrix Spike

 QC
 Duplicates, in order to meet or exceed method and regulatory requirements. This report contains only results for Batch QC derived from samples included in this report. Complete Batch QC results are available upon request. In cases where there is insufficient sample provided for Sample Duplicates and/or Matrix Spikes, a Lab Control Sample Duplicate (LCS Dup) is analyzed to demonstrate accuracy and precision of the extraction and analysis.

DRAFT REPORT

The results provided in this report are PRELIMINARY and are subject to change based on subsequent analysis, QC validation or final data review. Please use these results with the understanding that they may have not been finalized by the laboratory

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12232 S.W. Garden Place Tigard, OR 97223 503-718-2323 Phone 503-718-0333 Fax 1. S. .

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2709-D Pan American Freeway, NE Albuquerque, NM 87107 Project Number: 801050 Project Manager: Jacinta Tenorio 02/25/08 14:09	Pinnacle Laboratories, Inc.	Project: MC	
Albuquerque, NM 87107 Project Manager: Jacinta Tenorio 02/25/08 14:09 Bloquerque, NM 87107 Project Manager: Jacinta Tenorio 02/25/08 14:09	2709-D Pan American Freeway, NE	Project Number: 801050	Reported:
Den La	Albuquerque, NM 87107	Project Manager: Jacinta Tenorio	02/25/08 14:09
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Pinnacle LaboratoriesDW 2709 D Pan American Freeway NE Albuquerque,NM 87107 PO #: 801050 Client Project #: MC Date Sampled: Jan 15, 2008 Jan 22, 2008; Invoice: 57486

Report Summary

Date Received: Jan 16, 2008

FCL Project Manager: June S. Flowers

Laboratory #	Sample Description	Analysis	Chemist	Location	SampleMatrix
57486DW1	Starlake#2/801050-01	EPA200.8	EVB	Main Lab	Drinking Water
		EPA245.1	EVB	Main Lab	

Certificate of Results

Sample integrity was certified prior to analysis. Test results meet all requirements of the NELAC Standards except as noted in the Quality Control Report. Uncertainties for these data are available on request. This report may not be reproduced in part; results relate only to items tested.



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Pinnacle LaboratoriesDW 2709 D Pan American Freeway NE Albuquerque,NM 87107

PO #: 801050 Client Project #: MC Date Sampled: Jan 15, 2008 Jan 22, 2008; Invoice: 57486

Analysis Report

Lab #: 57/486DW1 Sampled: 01/15/08 10	00 AM Desc:	Starlake#2/80	1050-	01					
Parameter	Result	Units	Ч	MDL	PQL	QC Batch	Method	CAS #	Analyzed
Antimony	0.00100 U	mg/L	1.00	0.00100	0.00200	10096871	EPA200.8	7440-36-0	01/17/08
Arsenic	0.00100 U	mg/L	1.00	0.00100	0.00200	10096871	EPA200.8	7440-38-2	01/17/08
Barium	0.0708	mg/L	.00	0.00200	0.00400	10096871	EPA200.8	7440-39-3	01/17/08
Beryllium	0.00100 U	mg/L	.0	0.00100	0.00200	10096871	EPA200.8	7440-41-7	01/17/08
Cadmium	0.00100 U	mg/L	1.00	0.00100	0.00200	10096871	EPA200.8	7440-43-9	01/17/08
Chromium	0.133	mg/L	1.00	0.00100	0.00200	10096871	EPA200.8	7440-47-3	01/17/08
Nickel	0.00100 U	mg/L	.0	0.00100	0.00200	10096871	EPA200.8	7440-02-0	01/17/08
Selenium	0.00200 U	mg/L	.0	0.00200	0.00400	10096871	EPA200.8	7782-49-2	01/17/08
Thallium	0.00100 U	mg/L	1.00	0.00100	0.00200	10096871	EPA200.8	7440-28-0	01/17/08
Mercury	0.0000170 U	mg/L	1.00	0.0000170	0.0000400	10097106	EPA245.1	7439-97-6	01/22/08

FLDOH: E86562 (South Lab) FLDOH: E82405 (North Lab) NJDEP: FL015 FLDOH: E83018 (Main Lab)

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P.O. Box 1200, Madison FL 3	Port St. Lucie FL 32341 Phone 85(. 34952-2860 0-973-6878	Fax 850-973-687	2 - 343 - 8006 '8	Fax 772 - 343 - 8089		
innacle LaboratoriesDW 709 D Pan American Freeway NE Ibuquerque,NM 87107			PO #: 80105 Client Projec Date Sample Jan 22, 2008	0 t #: MC id: Jan 15, 2008 i; Invoice: 57486			
			Quality	Report			
y Control Batch, 10096871	Analyst: E Result 0.00100U 0.00100U 0.00100U 0.00100U 0.00100U 0.00100U 0.00100U 0.00100U	VB Units mg/L mg/L mg/L mg/L					
atory Control Sample ony c um um um um	Result 0.0963 0.0962 0.105 0.111 0.101 0.101 0.102 0.0988 0.101	Units mg/L mg/L mg/L mg/L mg/L mg/L	Spike 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100 0.100	%REC 96.26 96.17 105.21 110.77 100.00 101.30 98.79 98.79	%REC Lim 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00		
spike מילד ה נות um	Result 0.0789 0.103 0.113 0.0961 0.0861	Units mg/L mg/L mg/L	Spike 0.0800 0.0800 0.0800 0.0800 0.0800	%REC 96.75 128.94 118.88 120.18 107.61	%REC Lim 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00 80.00-120.00	Sample 0.00152 0.00100U 0.00100U 0.00100U 0.00100U	

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Pinnacle LaboratoriesDW 2709 D Pan American Freeway NE Albuquerque,NM 87107

PO #: 801050 Client Project #: MC Date Sampled: Jan 15, 2008 Jan 22, 2008; Invoice: 57486

Quality Control Batch: 10096871	Analyst: FWI			中心的影响的自己的影响的影响		はないとないないであるのです。		
Matrix Spike	Result	Units	Spike	%REC	%REC Lim	Samole		
Chromium	0.0927	mg/L	0.0800	99.35	80.00-120.00	0.0133		r
Nickel	0.0780	mg/L	0.0800	95.95	80.00-120.00	0.00126		٠
Selenium	0.121	mg/L	0.0800	150.96	80.00-120.00	0.00200U		
Thallium	0.0824	mg/L	0.0800	103.01	80.00-120.00	0.00100U		
Matrix Spike Duplicate	Result	Units	Spike	%REC	%REC Lim	Sample	RPD	RPD I im
Antimony	0.0810	mg/L	0.0800	99.30	80.00-120.00	0.00152	2.55	20.00
Arsenic	0.104	mg/L	0.0800	130.29	80.00-120.00	0.00100U	1.04	20.00
Barium	0.113	mg/L	0.0800	118.26	80.00-120.00	0.0183	0.43	20.00
Beryllium	0.0967	mg/L	0.0800	120.90	80.00-120.00	0.00100U	0.60	20.00
Cadmium	0.0843	mg/L	0.0800	105.34	80.00-120.00	0,00100U	2.14	20.00
Chromium	0.0964	mg/L	0.0800	103.96	80.00-120.00	0.0133	3.90	20.00
Nickel	0.0785	mg/L	0.0800	96.50	80.00-120.00	0.00126	0.56	20.00
Selenium	0.125		0.0800	156.16	80.00-120.00	0.00200U	3.39	20.00
Thallium	0.0801	mg/L	0.0800	100.09	80.00-120.00	0.00100U	2.88	20.00
Quality Control Batch: 10092406	Analyst: EV	9						
Blank	Result	Units				in the state of the second second second		
Mercury	0.0000170U	mg/t_						
Laboratory Control Sample Mercury	Result 0.00310	Units mg/L	Spike 0.00300	% REC 103.30	% REC Lim 92.96-111.03			
Matrix Spike Mercury	Result 0.00302	Units mg/L	Spike 0.00300	%REC 100.70	%REC Lim 91.53-113.30	Sample 0.0000170U		
Matrix Spike Duplicate Mercury	Result 0.00304	Units mg/L	Spike 0.00300	% REC 101.40	%REC Lim 91.53-113.30	Sample 0.0000170U	RPD 0.69	RPD Lim
		ı						-

NJDEP: FL015 FLDOH: E86562 (South Lab) FLDOH: E82405 (North Lab) FLDOH: E83018 (Main Lab)

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Pinnacle LaboratoriesDW 2709 D Pan American Freeway NE Albuquerque,NM 87107 PO #: 801050 Client Project #: MC Date Sampled: Jan 15, 2008 Jan 22, 2008; Invoice: 57486

Narrative Report

Sample Handling

Sample handling and holding time criteria were met for all samples. Samples collected by submitter. No unusual events occurred during analysis. Results are reported on a wet weight basis for aqueous matrices and on a dry weight basis for sludge and soil matrices unless otherwise noted. Sample results reported as dissolved were field filtered.

Quality Control

Enclosed analyses met method or FCL criteria, unless otherwise denoted on the sample results. Applied data qualifiers are defined below.

Attachments

Chain of Custody

Qualifier	Meaning
U	Compound was analyzed for but not detected.
J	One or more QC samples associated with this data value exceeded QC limits.
J1	Surrogate recovery limits have been exceeded.
J2	No known quality control criteria exist for the component.
J3	Reported value failed to meet established quality control criteria for either precision or accuracy.
J4	Sample matrix interfered with the ability to make an accurate determination on the spiked sample.
Q	Sample held beyond the accepted holding time.
L	Off-scale high; reported concentration exceeds the highest standard.
V	Analyte was detected in both the sample and the associated method blank.
ZTNTC	Too numerous to count. Numeric value represents filtration volume.
А	Absent
Р	Present
т	Value reported is less than the statistical method detection limit. Reported for informational purposes only.
M	Value reported is greater than the statistical method detection limit, but less than the reported MDL.
G	The greatest of the dilutions performed did not yield sufficient oxygen depletion for valid data.
S	The least of the dilutions performed did not yield sufficient oxygen residual for valid data.
0	Result is greater than (over) the specified value.
1	Reported value is between the laboratory method detection limit and the laboratory practical quantitation limit.
В	Results based upon colony plate count outside ideal range.
Y	The laboratory analysis was from an improperly preserved sample. The data may not be accurate.

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Inorganic Contaminants Lab ID: 57487DW1 PWS ID: MC Sample ID: Starlake#2/801050-01

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Secondary Contaminants Lab (D: 57487DW1 PWS ID: MC Sample ID: Starlake#2/801050-01

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DOH Lab Cen # E83018 E83018
Analysis Time
Analysis Date 01/23/08 01/17/08
Lab MDL 0.200 2.50
Analytical Method EPA300.0 SM2540C
Qualifier
Analysis Result 3.97 2000
Units mg/L mg/L
MCL 500
n <u>Contam Name</u> Fluoride Total Dissolved Solids
Contan ID 1025 1930

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Radionuclides Lab ID: 57487DW1 PWS ID: MC Sample ID: Starlake#2/801050-01 A notice to

DOH Lab Cert # E83018
Analysis Time
Analysis Date 01/17/08
Lab MDL 0.00100
Anslytical Method EPA200.8
Qualifier
Analysis Result 0.00100
Units mg/L
MCL 0.030
n Contam Name Combined Uranium
Contan ID 4006

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DOH Lab E83018 83018 E83018 E83018 E83018 E83018 E83018 E83018 E83018 E83018 583018 EB3018 E83018 583018 Cert # Analysis Time Analysis 01/18/08 80/81/10 01/18/08 01/18/08 Date BD 0.5 0.5 0.5 0.5 0.5 0.5 0.500 ЫЛ P P EPA524.2 Analytical EPA524.2 EPA624.2 EPA524.2 Method Qualifier Analysis Result 0.500 Units ¶√L ¶√L ٦/bn J/Br -1/Bn -1/ըս 1/60 ٦₆ ٦/br 1/Gr J/Br 1/Br **√**Br J/Br ٦/Br 1/br ٦ſ ng/L ng/L **J/Bn** ng/L ng∕L J∕6⊓ ¶/₽n J/Br ק/ני 7/₿r 7/6r J/₿n ng/L ng/L ۲<mark>6</mark>۲ 1/6n ۲ وال 10000 MCL 600 75 22 ഗ trans-1,3,-Dichloropropene I, 1, 2, 2-Tetrachloroethane I, 1, 1, 2-Tetrachloroethane Dichlorodifluoromethane cis-1,2-Dichleroethylene cis-1,3-Dichloropropene ,3,5-Trimethylbenzene ,2,4-Trimethylbenzene .2,4,-trichlorobenzene I,2,3-Trichlorobenzene ,2,3-Trichloropropane -luorotrichloromethane **Bromochloromethane** .3-Dichlorobenzene Para-dichlorobenzene **Hexachlorobutadiene** ,1-Dichloropropene 2, 2-Dichloropropane 1,1-Dichloroethane tert-butylbenzene o-dichlorobenzene sopropylbenzene sec-butylbenzene Dibromomethane n-Propylbenzene Dichloromethane 4-Chlorotoluene 2-Chlorotoluene Chloromethane Bromomethane Bromobenzene n-butylbenzene Contam Name Chloroethane (yienes Contam 2955 2968 2969 2378 2380 2964 2976 Q

Sample ID: Starlake#2/801050-01 PWS ID: MC Lab (D: 57487DW1 Volatile Organics

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E83018

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ans-1,2-Dichloroethylene	100	ng/L	0.500	2	EPA524.2	0.500	0.5	01/18/08	ER3018
,2-Dichloroethane	ŝ	ng/L	0.500	þ	EPA524.2	0.500	0.5	01/18/08	ER3019
,1,1-trichloroethane	200	ng/L	0.500	þ	EPA524.2	0.500	0.5	01/18/08	ER2018
arbon tetrachloride	ო	ug/L	0.500	5	EPA524.2	0.500	0.5	01/18/08	E82018
,2-dichloropropane	2 2	ng/L	0.500	D	EPA524.2	0.500	0.5	01/18/08	E93018
richloroethylene	ო	ng/L	0.500	þ	EPA524.2	0.500	20	01/18/08	E82010
,1,2-trichloroethane	വ	J/Bn	0.500		EPA524.2	0.500	200	01/18/08	E00010
etrachloroethylene	ო	ug/L	0.500		FPAS24 2	0.500	С		
lonochlorobenzene	100	nav	0 500) =	C PCEAL C		у с Э и		E830 18
antene	-			> =	CTA024.4	0.000	6. 1	80/81/10	E83018
	- 1	- השיר -	0.00	5	EPA524.2	0.500	0.5	01/18/08	E83018
otuene		ug/L	0.500	∍	EPA524.2	0.500	0.5	01/18/08	E83018
thyłbenzene	700	ng/L	0.500	c	EPA524.2	0.500	0.5	01/18/08	F83018
tyrene	100	ng/L	0.500	þ	EPA524.2	0.500	0.5	01/18/08	E83018
	rans-1, 2-Dichloroethylene ,2-Dichloroethane ,1,1-trichloroethane ;arbon tetrachlorida ,2-dichloroptopane richloroethylene etrachloroethylene Annochlorobenzene etrachlorobenzene ithylbenzene ciluene thylbenzene	rans-1,2-Dichloroethylene 100 ,2-Dichloroethane 3 ,1,1-trichloroethane 200 arbon tetrachloride 3 ,2-dichloroptopane 5 ,2-dichloroethylene 3 ,1,2-trichloroethylene 3 ,1,2-trichloroethane 5 fertrachloroethylene 3 Annochlorobenzene 100 enzene 100 khylbenzene 100 khyrbenzene 100	rans-1,2-Dichloroethylene 100 ug/L ,2-Dichloroethane 3 ug/L ,1,1-trichloroethane 200 ug/L ,arbon tetrachloride 3 ug/L richloroethylene 5 ug/L richloroethylene 3 ug/L frichloroethylene 3 ug/L Monochloroethylene 3 ug/L Monochloroethylene 3 ug/L Monochlorobenzene 100 ug/L tetrachloroethylene 3 ug/L kenzene 100 ug/L kenzene 1000 ug/L kenzene 1000 ug/L	rans-1,2-Dichloroethylene 100 ug/L 0.500 ,2-Dichloroethane 3 ug/L 0.500 ,1,1-trichloroethane 3 ug/L 0.500 ,2-Dichloroethane 3 ug/L 0.500 ,2arbon tetrachloride 3 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Synthetic Organics Lab (D: 57487DW1 PWS (D: MC Sample ID: Starlake#2/801050-01

Contan	F			Analysis		Analytical	Lab		Extraction Analvsis	Analvais	DOH Lab
٥	Contam Name	MCL	Units	Result	Qualifier	Method	MDL.	RDL	Date Date	Time	Cert #
2005	Endrin	7	ng/L	0.0100	5	EPA 505	0.0100	0.01	01/23/0		E83018
2010	Lindane	0.2	ng/L	0.0100	റ	EPA 505	0.0100	0.02	01/23/0	8	E83018
2015	Methoxychior	6	ng/L	0.0500	þ	EPA505	0.0500	0.1	01/23/0	8	E83018
2020	Toxaphene	ო	∩0/ך	0.500)	EPA 505	0.500	-	01/23/0	8	E83018
2031	Dalapon	200	ng/L	1.00	2	EPA515.4	1.00	-	01/29/0	8	E83018
2032	Diquat	20	7/6n	0.400	Þ	EPA549.2	0.400	0.4	02/01/0		E83018
2033	Endothall	100	ng/L	9.00	5	EPA548.1	9.00	Ø	01/29/0	0	E83018
2034	Glyphosate	700	ng/L	6.00	5	EPA547	6.00	9	01/21/0	00	E83018
2035	Di(2-ethylhexyl) adipate	400	r₀/ŕ	0.600	C	EPA525.2	0.600	0.6	01/22/0	60	E83018
2036	Oxamyl (Vydate)	200	ug/L	2.00	5	EPA531.1	2.00	2.0	01/25/0	8	E83018
2037	Simazine	4	ng/L	0.0700	∍	EPA507	0.0700	0.07	01/25/0	8	E83018
2039	Di(2-ethylhexyl)phthalate	9	ng/L	0.600	5	EPA525.2	0.600	0.6	01/22/0	8	E83018
2040	Picloram	500	ng/L	0.100	D	EPA515.4	0.100	0.1	01/29/0	8	E83018
2041	Dinoseb	7	ng/L	0.200	>	EPA515.4	0.200	0.2	01/29/0	ø	E83018
2042	Hexachiorocyclopentadiene	50	ng/L	0.100	D	EPA505	0.100	0.1	01/23/0	8	E83018
2043	Aldicarb sulfoxide	N/A	ng/L	20.0	С	EPA531.1	20.0		01/25/0	80	E83018
2044	Aldicarb sulfone	N/A	ng/L	20.0	c	EPA531.1	20,0		01/25/0	80	E83018
2046	Carbofuran	6	ng/L	0.900	5	EPA531.1	0.900	0.9	01/25/0	8	E83018
2047	Aldicarb	N/A	ng/L	20.0	ב ב	EPA531.1	20.0		01/22/0	80	E83018
2050	Atrazine	ო	ng/L	0.100	n	EPA507	0.100	0.1	01/25/0	8	E83018
2051	Alachlor	24	n9/L	0.200	5	EPA507	0.200	0.2	01/25/0	8	E83018
2065	Heptachlor	4.0	ug/L	0.0100	c	EPA505	0.0100	0.04	01/23/0	8	E83018
2067	Heptachlor epoxide	0.2	ng/L	0.0100	D	EPA505	0.0100	0.02	01/23/0	8	E83018
2105	2,4-D	70	ng/L	0.100	þ	EPA515.4	0.100	0.1	01/29/0	ß	EB3018
2110	2,4,5-TP	50	ug/L	0.200	þ	EPA515.4	0.200	0.2	01/29/0	ø	E83018
2274	Hexachlorobenzene	*	ug/L	0,100	c	EPA 505	0.100	0.1	01/23/0	0	E83018
2306	Benzo(a)pyrene	0.2	лgЛ	0.0200	5	EPA525.2	0.0200	0.02	01/22/0	8	E83018
2326	Pentachlorophenol	-	ng/L	0.0400	5	EPA515.4	0.0400	0.04	01/29/0	8	E83018
2383	PolychlorinatedbiphenylsPCB	0.5	ug/L	0.100	Ð	EPA505	0.100	0.1	01/23/0	8	E83018
2931	Dibromochloropropane	0.2	ng/L	0.0200	5	EPA504.1	0.0200	0.02	01/23/0	8	E83018
2946	Ethylene Dibromide	0.02	ng/L	0.0100	S	EPA504.1	0.0100	0.01	01/23/0	8	E83018
2959	Chlordane	7	ng/L	0.0100	5	EPA505	0.0100	0.2	01/23/01		E83018

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ANALYTICAL REPORT

Job Number: 400-27849-1

Job Description: 801050

For:

Pinnacle Laboratories 2709-D Pan American Freeway Northeast Albuquerque, NM 87107 Attention: Francine Torivio

theburgh

Marty Edwards Project Manager I marty.edwards@testamericainc.com 01/30/2008 Revision: 2

The test results in this report meet all NELAP requirements for accredited parameters and relate only to the referenced samples. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without written approval from the laboratory.

TestAmerica Pensacola Certifications and Approvals: Alabama (40150), Arizona (AZ0710), Arkansas (88-0689), California (2510), Florida (E81010), Illinois (200041), Iowa (367), Kansas (E-10253), Kentucky UST (53), Louisiana (30748), Maryland (233), Massachusetts (M-FL094), Michigan (9912), New Hampshire (250507), New Jersey (FL006), New York (11503), North Carolina (314), North Dakota (R-108), Oklahoma (9810), Pennsylvania (68-00467), South Carolina (96026), Tennessee (TN02907), Texas (T104704286-08-TX), Virginia (00008), Washington (C2043), West Virginia (136), USDA Foreign Soil Permit (P330-08-00006).

TestAmerica Laboratories, Inc.TestAmerica Pensacola3365 McLemore Drive, Pensacola, FL 32514Tel (850) 474-1001Fax (850) 478-2671www.testamericainc.com



Page 1 of 14

Job Narrative 400-J27849-1

Comments

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No additional comments.

Receipt

All samples were received in good condition within temperature requirements.

GC VOA

Method 8015B: Sample (400-27849-1) was initially reported 5.2 mg/L for ethylene glycol. Upon furthur review, this hit was determined to be a false positive. The edited report reflects this change.

No other analytical or quality issues were noted.

and the second

METHOD SUMMARY

Client: Pinnacle Laboratories Job Number: 400-27849-1 Description Lab Location Method Preparation Method Matrix Water Nonhalogenated Organic using GC/FID (Direct Aqueous TAL SAV SW846 8015B Lab References: TAL SAV = TestAmerica Savannah Method References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

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METHOD / ANALYST SUMMARY

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Analyst ID Analyst Method Moncrief, Amy AM SW846 8015B

Client: Pinnacle Laboratories

Job Number: 400-27849-1

SAMPLE SUMMARY

Client: Pinnacle Laboratories

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Job Number: 400-27849-1

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Lab Sample ID	Client Sample ID	Client Matrix	Date/Time Sampled	Date/Time Received
400-27849-1	STARLAKE #2/801050-01	Water	01/15/2008 1000	01/16/2008 0950

SAMPLE RESULTS

TestAmerica Pensacola

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Client: Pinnacle Laboratories

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Job Number: 400-27849-1

Client Sample ID:	STARLAKE #2/801050-01		
Lab Sample ID:	400-27849-1	Date Sampled:	01/15/2008 1000
Client Matrix:	Water	Date Received:	01/16/2008 0950
	8015B Nonhalogenated Organic using	GC/FID (Direct Aqueous Injection)	

			· • •	-
Method:	8015B	Analysis Batch: 680-96158	Instrument ID:	GC Volatiles - G FID1
Preparation:	N/A		Lab File ID:	G01056.D
Dilution:	1.0		Initial Weight/	/olume: 1000 uL
Date Analyzed:	01/17/2008 1534		Final Weight/V	/olume: 1 mL
Date Prepared:	N/A		Injection Volur	ne: 1 uL
			Column ID:	PRIMARY
Analyte		Result (mg/L)	Qualifier	RL
Ethylene glycol	1	<5.0	(*************************************	5.0
Propylene glycol		<5.0		5.0

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QUALITY CONTROL RESULTS

TestAmerica Pensacola

Quality Control Results

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Client: Pinnacle Laboratories

Job Number: 400-27849-1

QC Association Summary

Lab Sample ID	Client Sample ID	Report Basis	Client Matrix	Method	Prep Batch
GC VOA					
Analysis Batch:680-9615	B				an a
LCS 680-96158/2	Lab Control Spike	Т	Water	8015B	
MB 680-96158/3	Method Blank	Т	Water	8015B	
400-27849-1	STARLAKE #2/801050-01	т	Water	8015B	

<u>Report Basis</u>

T = Total

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Quality Control Results

Job Number: 400-27849-1

Method Blank - Batch: 680-96158			Method: 8015B Preparation: N/A
Lab Sample ID:MB 680-96158/3Client Matrix:WaterDilution:1.0Date Analyzed:01/17/2008 1333Date Prepared:N/A	Analysis Batch: 680-96158 Prep Batch: N/A Units: mg/L		Instrument ID: GC Volatiles - G FID1 Lab File ID: G01055.D Initial Weight/Volume: 1000 uL Final Weight/Volume: 1 mL Injection Volume: 1 uL Column ID: PRIMARY
Analyte	Result	Qual	RL
Ethylene glycol Propylene glycol	<5.0 <5.0		5.0 5.0
Lab Control Spike - Batch: 680-96158			Method: 8015B Preparation: N/A
Lab Sample ID: LCS 680-96158/2 Client Matrix: Water Dilution: 1.0 Date Analyzed: 01/17/2008 1226 Date Prepared: N/A	Analysis Batch: 680-96158 Prep Batch: N/A Units: mg/L		Instrument ID: GC Volatiles - G FID1 Lab File ID: G01053.D Initial Weight/Volume: 1000 uL Final Weight/Volume: 1 mL Injection Volume: 1 uL

Analyte	Spike Amount	Result	% Rec.	Limit	Qual
Ethylene glycol	40.0	37.3	93	50 - 150	*****
Propylene glycol	40.1	37.8	94	50 - 150	

Column ID:

PRIMARY

Calculations are performed before rounding to avoid round-off errors in calculated results.

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Client: Pinnacle Laboratories

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DATA REPORTING QUALIFIERS

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Lab Section

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Client: Pinnacle Laboratories

Login Number: 27849 Creator: Chea, Vanda List Number: 1

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Question	T / F/ NA	Comment
Radioactivity either was not measured or, if measured, is at or below background	N/A	
The cooler's custody seal, if present, is intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	0.4°C
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	

Job Number: 400-27849-1

List Source: TestAmerica Pensacola

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Login Sample Receipt Check List

Client: Pinnacle Laboratories

Login Number: 27849

List Number: 1

Creator: Conner, Keaton

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نې بې Job Number: 400-27849-1

List Source: TestAmerica Savannah List Creation: 01/17/08 11:16 AM

Question	T / F/ NA Comment	t
Radioactivity either was not measured or, if measured, is at or below background	N/A	· · · · ·
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	Тгие	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	N/A	
Samples do not require splitting or compositing.	N/A	

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File : C:\HPCHEM\2\DATA\012208F\01220803.D Operator : STH Acquired : 22 Jan 2008 9:41 am using AcqMethod DR080121.M Instrument : FID-1 Sample Name: DRO CCV 200 UG/ML Misc Info : GC5-78-10 Vial Number: 3

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Operator : STH Acquired : 22 Jan 2008 10:14 am using AcqMethod DR080121.M Instrument : FID-1 File Sample Name: DRO WATER BLANK 012108FW Misc Info : 3.0ML/30ML BY STH ON 01/21/08@0944 Vial Number: 4



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File : C:\HPCHEM\2\DATA\012208F\01220807.D Operator : STH Acquired : 22 Jan 2008 11:49 am using AcqMethod DR080121.M Instrument : FID-1 Sample Name: 801050-01 [001X] 012108FW Misc Info : 3.0ML/30ML BY STH ON 01/21/08@0944 Vial Number: 7

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Operator : ARM
Acquired : 16 Jan 2008 11:33 am using AcqMethod BG100207.M
Instrument : GC-2 PID/
Sample Name: METHOD BLANK
Misc Info : 10UL MS5-98-19 + 10UL MS6-05-08
Vial Number: 4



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File : C:\HPCHEM\1\DATA\011608B\01160805.D
Operator : ARM
Acquired : 16 Jan 2008 12:12 pm using AcqMethod BG100207.M
Instrument : GC-2 PID/
Sample Name: 801050.01 [1X] 1000
Misc Info : 5ML + 10UL MS5-98-19 + 10UL MS6-05-08
Vial Number: 5



APPENDIX E WELL COMPLETION DIAGRAMS

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Bill To

PNM

Attn: Claudette Horn Alvarado Square Albuquerque, NM 87158-2610

			P.O). Number		Terms	Due Date
						Net 30	12/12/2008
Item	Description	Tick	et #	BBLS. / Yd	s.	Rate	Amount
Mat. Yds. Cloride Test	PNM Star Lake Comp. Station	4132			40 2	19.00 25.00	760.001 50.001
Mat. Yds. Cloride Test Fill Dirt		4130			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4133			38 2 38	19.00 25.00 4.00	722.001 50.001 152.001
Mat. Yds. Cloride Test Fill Dirt		4134			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4131			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Mat. Yds. Cloride Test		4128			40 2	19.00 25.00	760.00T 50.00T
Thank you for yo	our business.			Subto	otal		
		A A A A A A A A A A A A A A A A A A A		Sales	Tax	(6.0625%)	
				Paym	ent	s/Credits	
				Bala	nce	e Due	

Phone #	Fax #
575-774-6504	575-774-9116

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PNM Attn: Claudette Horn Alvarado Square Albuquerque, NM 87158-2610

			P.O. N	Number	Terms	Due Date
					Net 30	12/12/2008
Item	Description	Ticke	et #	BBLS. / Yds.	Rate	Amount
Fill Dirt				40	4.00	160.00T
Mat. Yds.		4129		40	19.00	760.00T
Cloride Test Fill Dirt				2 40	25.00 4.00	50.00T 160.00T
Mat. Yds. Clorida Test		4135		20	19.00 25.00	380.00T 25.00T
Fill Dirt				20	4.00	80.00T
Mat. Yds. Cloride Test Fill Dirt		4139		20 1 40	19.00 25.00 4.00	380.00T 25.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4138		20 1 40	19.00 25.00 4.00	380.00T 25.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4141		40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Thank you for your busine	SS.			Subtota	l	
Le <u></u>				Sales Ta	x (6.0625%)	
				Paymen	ts/Credits	
				Balanc	ce Due	· · · · · · · · · · · · · · · · · · ·

Phone #	Fax #
575-774-6504	575-774-9116

Bill To

PNM Attn: Claudette Horn Alvarado Square Albuquerque, NM 87158-2610

			P.O	. Number		Terms	Due Date
					•	Net 30	12/12/2008
Item	Description	Ticke	et #	BBLS. / Yd	s.	Rate	Amount
Mat. Yds. Cloride Test Fill Dirt		4142			40 2 40	19.00 25.00 4.00	760.001 50.001 160.001
Mat. Yds. Cloride Test Fill Dirt		4148			40 2 40	19.00 25.00 4.00	760.001 50.001 160.001
Mat. Yds. Cloride Test Fill Dirt		4140			38 2 40	19.00 25.00 4.00	722.001 50.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4145			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4144			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Thank you for your busine	\$5.			Subto	tal		
L <u></u>				Sales	Tax	(6.0625%)	
				Paym	ents	s/Credits	
				Bala	nce	e Due	

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er er PNM Attn: Claudette Horn Alvarado Square Albuquerque, NM 87158-2610

		Γ	P.O. Number	Term	s	Due Date
				Net 3	0	12/12/2008
Item	Description	Ticket	# BBLS. / Yc	ls. Re	ate	Amount
Mat. Yds. Cloride Test		4161		40 2	19.00 25.00	760.001 50.001
Mat. Yds. Cloride Test Fill Dirt		4156		40 2 20	19.00 25.00 4.00	760.00T 50.00T 80.00T
Mat. Yds. Cloride Test Fill Dirt		4153		40 2 20	19.00 25.00 4.00	760.00T 50.00T 80.00T
Mat, Yds. Cloride Test Fill Dirt		4154		40 2 20	19.00 25.00 4.00	760.00T 50.00T 80.00T
Mat. Yds. Cloride Test Fill Dirt		4152		40 2 20	19.00 25.00 4.00	760.00T 50.00T 80.00T
Mat. Yds. Cloride Test		4151		40 2	19.00 25.00	760.00T 50.00T
Thank you for your busine	255.		Subto	otal	l	
			Sales	Tax (6.06	25%)	·
			Paym	ents/Crec	dits	

Balance Due

Phone #	Fax #
575-774-6504	575-774-9116

Bill To

PNM Attn: Claudette Horn Alvarado Square Albuquerque, NM 87158-2610

			P.O. 1	Number		Terms	Due [,] Date
						Net 30	12/12/2008
Item	Description	Ticke	et #	BBLS. / Yd	s.	Rate	Amount
Fill Dirt		-			20	4.00	80.001
Mat. Yds. Cloride Test Fill Dirt		4155			38 2 20	19.00 25.00 4.00	722.001 50.001 80.001
Mat. Yds. Cloride Test Fill Dirt		4157			40 2 20	19.00 25.00 4.00	760.001 50.001 80.001
Mat. Yds. Cloride Test Fill Dirt	· · ·	4150			40 2 20	19.00 25.00 4.00	760.00T 50.00T 80.00T
Mat. Yds. Cloride Test Fill Dirt		4146			40 2 40	19.00 25.00 4.00	760.00T 50.00T 160.00T
Mat. Yds. Cloride Test Fill Dirt		4143			20 1 40	19.00 25.00 4.00	380.00T 25.00T 160.00T
Thank you for your	business.			Subto	tal		\$23,408.00
<u></u>				Sales	Tax	(6.0625%)	\$1,419.11
				Paym	ent	s/Credits	\$0.00
				Bala	nc	e Due	\$24,827.11

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ate: <u>i</u> t	128/08-	Customer:	114	<u></u>				
/ell Nan	ne & Number:	5the lake Con	0					
rucking	Co.: <u>loc</u>	Lois Trucking			Unit N	o.: <u>69</u>	'2	
river (p	rint): <u>Jose</u>	L'Hantaja	Customer Sigi	nature:				
rdered	By: <u>Mark</u>	~		Delivery	Ticket N	o.: <u>142</u>	200	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	feri 1 fistate		188			~	
2	20	lose Plates	i	1., D			~	
3		0			a <u></u>			
4								
5			1					
6	3							
7		10.2 2 10.218 12 12						
8								
9								
10			1					
11			1					
12								
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15								
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Date:	<u> </u>	<u>8-08</u>	Sustomer:	A							-
Vell Nar	ne & Num	$\frac{1}{1} = \frac{1}{1} = \frac{1}$	LAKC (<u>tompk</u>	<u> C </u>	<u>S P</u>	<u>ation</u>				_ ·
	rint): /	into Pohu		Custo	mor Sign		Unit N	0.: <u> </u>	•	<u> </u>	-
Driver (p	By: 7	NM - A	Jark	Cusio Tech	hiler Sigi 국표 14:	20602	Ticket N	0.: 48		Iding Ir	- ? C
ITEM NO.	BBLS or YRDS.	DRIV	ER'S SIGNATURE		PAINT FILTER TEST RATIO	CHLORIDE	LAB SAMPLE	REJECTED	PASSED	CELL	
1	.20	Dinda A	obison			128			~		
2	20 (Venda K	obision			/33			~	· · · · · · · · · · · · · · · · · · ·	
3											
4											-
5											
6								· ·			
7			~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~								
8 	20	RIII Dirt				-					
 	20	Fill Dirt									1
11											
12		·									
13											
14			<u></u>								
15					·······						
16											
17							,				

		COMMERCIA T-N-T En #70 CR 40	L LAP vironi 5 • Lind	NDFA menta	RM TI al, Inc. A 87029	ICKET		Tic 41	ket 3
Date: 2	10-	28-08 Customer:	PN,	N					
Well Nan	ne & Nui	mber: Arada Farm	÷	P	3-	Ster	Lake	Cu,	*7
Truckina	Co.: /	In to Frens		#		Únit N	0.:		\$
Driver (pi	rint):	R Presto	Custo	mer Siar	nature:	-RI	Z	2	
Ordered	Ву:	Marx			Delivery	Ticket N	o.: <u>17</u>	200	Ē
ITEM NO.	BBLS OF YRDS.	DRIVER'S SIGNATURE		PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	
1	19	RProdo			178				
2	15	RPark			152				
3			;			·····			
4									
5									
6									
7									
8	I A	Faill Durt							
9	19	Fill Dirt							
10									
11				<u>=.</u> ,					
12									
13			1						
14									
15									
16			;						
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COPIES: WHITE -- Landfarm YELLOW -- Customer PINK -- Landfarm GOLD -- Transporter

		COMMERCIAL L T-N-T Envir #70 CR 405	ANDFA onmenta Lindrith, NN	RM TI a l, Inc. / 87029	ICKET	ſ	Tic A	ket No. . 34
Date:	0-28	- 0 8Customer:	Ze Mª	•				
Vell Nar	ne & Nun	iber: Star Iche Compress	301					
rucking	Co.: <u></u>	Ym M Construto	Δ		Unit N	o.:		
)river (p	rint): $\underline{\mathcal{R}_{Y}}$	An RADOJETA C	ustomer Sigr	nature:			·····	
Ordered	ву:́Д∡	frie		_Delivery	Ticket N	o.:_ <u>14</u>	200	<u>)</u>
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	-Ryen Rodokt		256				
2	20	Ryen Roologa)	160			/	
3					 			
4								
5								
6								
7								
8	20	Clean Fill		-				
9	30	Clean Fill						
11								<u></u>
12								
13								
14		· · · · · · · · · · · · · · · · · · ·						
15								
16								
17								

COPIES:	WHITE — Landfarm	YELLOW Customer	PINK — Landfarm	GOLD — Transporter
	Contraction of the second second		contraction and the	COLD Hanoportor

	//	#70 CR 405	• Lin	arith, NN	/18/029				
Date: <u>10</u>	5/28/	0 gCustomer:N	in		·····				
Well Nan	ne & Nun	nber: <u>Star lake</u> (cin p	<u> </u>					
Trucking	Co.: <u>R</u>	ceds Welding				Unit N	o.: <u>120</u>	7	
Driver (pı	rint): <u>- {-{</u>	anold Raution	Custo	omer Sigr	nature:				
Drdered	By: <u>Мо</u>	<u>ck</u>		- 1	_Delivery	Ticket N	0.: 14	2000	······································
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE		PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	HE			177			~	
2	Ĥ	SFI			182			/	
3									
4									
5									
6									
7									
8	20	Clean Fill							
9	20	Clean Fill							
10			:						
11			!						
12									
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14									
15									
16			;						
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	I I I I I I I I I I I I I I I I I I I	COMMERCIAL LA T-N-T Environ #70 CR 405 • Lir	NDFA menta ndrith, NN	RM TI al, Inc. 1 87029	ICKET	.	Tick 41	iet No. 28
Date: <u>/</u>	0-28-0	08Customer:M	(*	#142.00	(oc)			
vell Nan	ne & Num	nber: <u>Star Lake Conf</u>						
rucking	Co.: <u> </u>	outz & BUISUM		, 	Unit N	o.:_ <u></u> /	5	
river (pr	rint): <u>Ze</u>	Varmino J Villarial Custo	omer Sigr	nature:				
rdered	By: <u></u>	MA Skelianos Kevin Law	reniz	Delivery	Ticket N	0.:		
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Belarimino S Villaria		136			Comment.	· · · · · · · · · · · · · · · · · · ·
2	20	Belanning J Villarial		142			~	
3				•				
4								
5								
6			-		- 1. - 5			
7								
8	20	Chean Fill						
9	20	Clean CHFill						
10								
11								
12								
13								
14						-		
15								
16								
1								

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		I - N− I ⊑NV #70 CR 405	• Lin	drith, NN	ai, INC. A 87029			3 auh	ar kanar Sand
oate: <u> </u> [2-21	<u> 7-08</u> _Customer:	N/	R					
Vell Nan	ne & Nur	nber: Star Lake C	om	0.					
rucking	Co.: _/	loberg				Unit N	lo.: <u>5</u>	0	
river (p	rint): <u> </u>	obert Benjamin	Custo	omer Sigr	nature:	PNA	1		
rdered	ву: Д	ar K			_Delivery	Ticket N	0.: 41	3112	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE		PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELI
1	20	Robert Barinin			130				
2 ~	20	Rohmet Bazin			148			1	
3									
4									
5									
6									
7									
8	200	Plan Fill							
9	20	Clean Lill							<u></u> ,
10	~~		:						
11									
12			1						
13									
14									
15			:					3	
16									
17			:						
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		COMMERCIAL L T-N-T Enviro #70 CR 405	ANDFA onmenta Lindrith, NN	RM TI 1, Inc. 1 87029		Г	Tic 41	ket No. . 35
Date: <u>၂</u>	128/0	Customer: PNM	<u> </u>		,		<u></u>	
Well Nam	ne & Num	iber: <u>Star lake Comp.</u>						
Trucking	Co.: <u>F</u>	sutz and Bursum	Cons	<u>+-</u>	_ Unit N	o.: <u>5</u> 7	7-6	68
Driver (pr	rint): <u>E</u>	min Haines Ci	ustomer Sigr	nature:				
Ordered I	By: <u>М</u> а	-k		_Delivery	Ticket N	o.: <u>14</u> 2	600	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Entin Ham		179			i	
2		6						
3							- 11-	
4								
5								
6								
7								
8	QD	Clean Fill						
9								
11								
12								
13								
14								
15	·							
16					<u> </u>			
17								

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ate:	5-29-1	ວຮCustomer:	<u>~</u>					
Vell Nam	ne & Num	ber: Start Lake Co	<u>MP</u>					
rucking	00.: <u>ح</u>	hmitz Gonst			Unit N	0.:		
river (pr	rint): <u>,5 e</u>	<u></u> C	ustomer Sig	nature:				
rdered	By: <u>үү о</u>	<u>r</u> Ľ		Delivery	Ticket N	o.: <u>142</u> C	000	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	hits Calling		181			\checkmark	
2		-0			9			
3								
4								
5								
6								
. 7		·						
- 8	20	Chan Fill						
9	20	Clem Fill						
10		· · · · · · · · · · · · · · · · · · ·						, , , , , , , , , , , , , , , , ,
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13		· · · ·						
14								
15								
16								
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		COMMERCIAL T-N-T Envi #70 CR 405	LANDFA	RM TI al, Inc. 1/ 87029	ICKE		Tic 4 1	ket No. . 38	
Date: <u>/</u>	0/24/0	Customer: <u>PN</u>	M						
Vell Nan	ne & Num	ber: Stare Lake CC	mp						
Frucking	co.: <u></u>	hmote Cons.	7 .		_ Unit N	lo.:		. <u> </u>	
Driver (p	rint): <u> </u>	licholas	Customer Sigi	nature:				·	
Ordered	Ву:	a-k		Delivery	Ticket N	o.: <u>142</u>	2000		
ITEM NO.	BBLS OF YRDS	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL	
1	20	Maho My PS		240					
2									
3					nam				
4									
5									
6									
7									
8	20	Clean Fill							
9	20	Clean Fill							
10									
11									
12					L				
13									
14									
15									
16									
17		······································							

Date 10-29-08 T-N-T Attendant Herm Jup COPIES: WHITE - Landfarm YELLOW - Customer PINK Landfarm GOLD - Transporter

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)ate: [<u>ບ</u>	-29	-08 Customer: <u>P1</u>	in						
Vell Nam	ne & Num	ber: STAR LAKE CON	inp						
rucking	Co.: <u>F/</u>	yih M	. 1			Unit N	o.:1		,
)river (pr	int): R	VAN RADOULTS	Customer S	Sigr	nature:				
Ordered I	∃у://	1 AR IC			_Delivery	Ticket N	o.:_ <u>]4</u>	2600	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAIN FILTI TES RATI	NT ER ST IO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Ryan Radoi	\sum		1.32			lum	
2	20	Puyen Rodois)		174			\checkmark	
3									
4									
5									
6									
7			-			· · · · · · · · · · · · · · · · · · ·			
8	70								
9	20								
10	20	Chein PIT							
11		· · · · · · · · · · · · · · · · · · ·							
12									
13									
14									
15			1						
16			1 C						

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)	Tick AL		CKET	RM TI 1, Inc. 187029	ANDFA nmenta .indrith, NM	COMMERCIAL L T-N-T Envir #70 CR 405 •	A MARINA STATE	
				17	& Burso	Customer: Foutz	2-29-08	Date: _/
		11	tatio	58-5	<u>ompres</u>	per: <u>pNM Starlake (</u>	ne & Numt	Vell Nan
		o.: <u>514</u>	Unit N			Itz & BUISUM	Co.: <u>Fo</u> u	Frucking
		Ar 11.6		ature:	stomer Sign	armino J Uillarial C	rint): <u>Beli</u>	Driver (pi
	2000	o.: <u>#*/4</u>	Ticket N	_Delivery			By:	Drdered
ELL	PASSED	REJECTED	LAB SAMPLE	CHLORIDE RESULTS	PAINT FILTER TEST RATIO	DRIVER'S SIGNATURE	BBLS or YRDS.	ITEM NO.
	V			130			20	1
	V		**	184			20	2
								3
								4
								5
								6
								7
				ge.		Clean Fill	20	8
						Clean Fill	20	9
								11
								12
								13
								14
								15
								16
						<u> </u>		

Date	10/2	9/	1 6%
	_		

OLI _T-N-T Attendant

		COMMERCIAL I T-N-T Envir #70 CR 405 •	ANDFA	RM TI al, Inc. M 87029	ICKET	Г	тіс 41	ket No. . 4 8
Date:	10-2	<u>9-08</u> Customer:	IM					
Well Nar	ne & Nun	ber: Star LAKA Con	1.p					
Trucking	Co.: <u>F</u>	sucte and Bursum Co.	nst.		_ Unit N	o.:5	17	
Driver (p	rint): <u> </u>	min Hannes c	ustomer Sigi	nature:				
Ordered	By:	ARK		Delivery	Ticket N	o.: <u>14</u>	2000	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20			221			~	
2	20			183			V	
3								
4								
5								
6								
7								
8	20	Clem Fill						
9	20	Clean Fill						
10								
11								
12		:				-		
13								
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15		· · · · · · · · · · · · · · · · · · ·						
16								
17								

Date <u>10-29-09</u> T-N-T Attendant <u>Herry Furgury</u> **COPIES:** WHITE - Landfarm YELLOW - Customer PINK Landfarm GOLD - Transporter

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,40	4]			I, Inc. 1 87029	nmenta Lindrith, NM	T-ℕ-T Envi r #70 CR 405 ●	NINIT.	/ <u>ک</u> بر ۱۱۱۱٬۱۷
					NM	<u>9-08</u> Customer:	10-2	ate:
		- <u></u>			mp	ber: Ster Lake Co	ie & Num	ell Nan
		0.:	_ Unit N		23	Prodo Ferma 1	Co.:	ucking
		red	RI	ature:	istomer Sigr	oser Puda	int):	iver (pi
00	4200	0.:	Ticket N	_Delivery		North	Зу:	dered
CELL	PASSED	REJECTED	LAB SAMPLE	CHLORIDE RESULTS	PAINT FILTER TEST RATIO	DRIVER'S SIGNATURE	BBLS YRDS	IEM NO.
	~			126		Rfach	19	1
	2			233		Rhads	19	2
								3
								4
								5
								6
								7
						Clean Fill	20	8
						Clean Fill	20	9
								10
								11
<u> </u>								12
								13
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								15
								16

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		T-N-T #70 CR	Environ 405 • Lin	menta drith, NN	a l, Inc. /1 87029			41	45
ate:	<u>c /29/</u>	Customer:	PNM						
/ell Nan	ne & Nur	nber: <u>star lake Comp</u>	>						
rucking	Co.: <u>R</u>	eed Trucking				Unit N	0.: <u>Qo</u> _	7	
river (pi	rint): H	rold Rautin	Custo	omer Sigr	nature:				
rdered	By: <u>M</u> e	~-h			_Delivery	Ticket N	o.: <u>1420</u>	000	
ITEM NO.	BBLS M NO. or DRIVER'S SIGNATURE YRDS.			PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CEL
1	20	AR	····		140			~	
2	20	a Fe			202			2	
3									
4									
5			· · · · · · · ·						
6									
7									
8	·7 A								
9	20	Ri Fil							
10	<u>~</u>	(deen Fill							
11									
12			1						<u> </u>
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		L	<u>:</u> <u> </u>				I		RCI - 03(

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		COMMERCIAL LA T-N-T Enviro #70 CR 405 • 1	Г	Тіскеt No. 4 <u>1</u> 44				
Date:	0-29	-OF Customer: PN	М					
Well Nam	ne & Num	ber: Star Lake (Comp					
Trucking	Co.:	JeeLuis Trucking	<u>}</u>		Unit N	o.:	92	
Driver (pr	rint):	tertosé L-Partere cu	stomer Sigr	nature:				
Ordered I	Ву:	`		_Delivery	Ticket N	o.: <u>1420</u>	000	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Jose 1 Parter-		210			i pro	
2	20	Jose 1 Parton		240			1	
3		Jan				-		
4								
5								
6								
7								
8	20	Clean Fill					-	
9	20	Clean Fill						
10		~						
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14						-		
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17								

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Date	10/291	68

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	11	#70 CR 405	 Lindrith, NN 	A 87029				
Date:	10-3	0-08Customer:	DN m	<u> </u>				
Well Nar	ne & Nun	nber: STAR LAKE	Comp				······	
Trucking	Co.: 5	chmitz			Unit N	0.:		
Driver (p	rint): S	eth(Customer Sigr	nature:				
Ordered	By:	r8		Delivery	Ticket N	o.: <u>14</u>	2000	?
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	30	forthe Calling	[-]	724			V	
2	20	Betty Galance)-1	473	<u>, , , , , , , , , , , , , , , , , </u>		\checkmark	
3								<u> </u>
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5								
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COMMERCIAL LANDFARM TICKET T-N-T Environmental, Inc. #70 CR 405 • Lindrith, NM 87029								ket No. 56	
Date:	10-3	30-08_Customer:	vm_	"3P	(د (
Well Nan	ne & Num	ber: <u>STAR LAKE</u>	Com	ρ					
Trucking	Co.: /	oberg	,	· · · · · · · · · · · · · · · · · · ·	Unit N	0.: 5	6		
Driver (p	rint): <u>Ko</u>	bert Benjamin Cus	tomer Sigr	nature:/	PNN.	1	-9-19-10		
Ordered	ву: <u>PA</u>	May Charlie Dean	,)	/ Delivery	Vl <i>obert</i> Ticket N	o.: <u>14</u>	8130 2000		
ITEM NO.	BBLS OF YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL	
1	20	Blutt Bernin	1-1	2.74			5		
2	20	Rebut Buynn	1-1	431					
3		0							
4									
5		·					; <u>``</u>	and the second second	
6									
7									
8		· ·			<u>/</u>				
9		<i>Pi</i> - <i>P</i>			:				
10	20	Fill Dir+ clean			·				
11									
12									:
13									PLANE AND
14						-			COMER TANANANA
15			-						agen (12) Yelle weiterstellt en
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COPIES: WHITE -- Landfarm YELLOW -- Customer PINK -- Landfarm GOLD -- Transporter
ate:	10 -	30-08 Customer:	NM	·	<u>~ 31</u>	>		
Vell Nan	ne & Nun	nber: STAR LAKE	Com	ρ				
rucking	Co.:Ĭ	Moberg			Unit N	lo.:(`>	2	
Driver (pi	rint):	-inda Robison Cust	omer Sig	nature:			<u>.</u>	
Ordered	ву:_ <u>(^</u>	artie Dean - 3.D		Delivery	Ticket N	1776 0.: <u>Foutz</u>	berg Job#1	48 4200
ITEM NO.	BBLS or YRDS	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CEL
1	20	Kinda Robison	1-1	393			V	1
2	20	Simla Robison	1-1	505			~	
3								
4								
5								
6								
7								
8								
9	20	Clean FIIDiRt Renda Robison						
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		COMMERCIAL LA T-N-T Enviro #70 CR 405 • L	NDFA nmenta indrith, NN	RM TI a l, Inc . 1 87029	ICKET	950	Tici 41	set No. 54
Date:	16~ 3	20-08 Customer: <u>P1</u>	m					
Well Nam	ne & Num	ber: STAN LAKA	Comp					
Trucking	Co.:	Reeps Welding			Unit N	o.: <u>12</u>	07	
Driver (pr	-int):	tearld Cus	stomer Sigr	nature:	•			
Ordered	Ву:,	ARK		_Delivery	Ticket N	o.:_ <u>14</u>	2000)
ITEM NO.	BBLS or (RDS.)	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	418	1-1	116		à		
2	20	BE	1-1	204		V		
3								
4						•		
5								
6								
7								
8	20	BACK Fill Dirt						
9		- · ·	•					
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15								-
16								
17		·						

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ate: /)- 30- ri	Se Customer na	(ma					
/oll Nar	ne & Num	her Stan Lake	<u> </u>	~				
		The M	Jon	Y	Lipit N			
iucking	vint): R	ya Rapaits an	tomor Ciar		Official	0		
river (p		-k	somer sigr	nature:		. 1//	2000	
rdered	BA: <u>60</u>		····	_Delivery		0.: <u>Y</u>	~~~~	1
ITEM NO.	BBLS Or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CEI
1	20	Pryon Food of]-1 ·	327			in	
2	20	Typen Predlyp	1-1	343			ir	
3								
4								
5								
6								
7								
8								
9								
10	20	clean fill dirt						-
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12								
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14			_					
15								
16				1				
17								

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		COMMERCIAL L T-N-T Enviro #70 CR 405 •	ANDFA onmenta Lindrith, NN	RM TI 1, Inc. 1 87029	ICKET		тіс 41	ket No. 51
Date:	10-	3 <i>0~68</i> _Customer:	NM					
Well Nar	me & Num	iber: STAR LAKE	Comp			<u>.</u>		
Trucking	Co.:	Joe LOIS Trocking			Unit N	o.: <u>69</u>	2	
Driver (p	erint):	José L. Pantoja ci	ustomer Sigr	nature:				
Ordered	Ву:	AEK		_Delivery	Ticket N	o.: <u>14</u>	2000	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	José & Partajo	1-1	327			de la constanción de	
2 [.]	20	Jere I Partaja	1-1	628			V	
3		0						
4								
5								
6								
7								
8	20	CLEAN Fill						
9								
10								
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COPIES	WHITE — Landfarm	YELLOW Custom	her PINK Landfar	m GOLD — Transr

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		T-N-T Envir #70 CR 405 •	onmenta Lindrith, NN	al, Inc. ⁄/ 87029				.55	
)ate:	10-30	<u> -08</u> Customer: <u>p</u>	VM						
Vell Nan	ne & Num	ber: STAR Lake	Comp						
rucking	Co.: 🥂	rado Forma			Unit N	o.:/	03		
) river (pi	rint):	Roser Prodo a	ustomer Sigi	nature:	RF	noto			
)rdered	By:	Mark		_Delivery	Ticket N	o.: <u>14</u> .	2.000		
ITEM NO.	BBLS OF YRDS.	DRIVER'S SIGNATURE	SIGNATURE PAINT FILTER CHLORIDE LAB TEST RESULTS SAMPLE REJECTED PASSED						
1	19	RPada	1-1	347			2		
2	19	RRA	1-1	243			V		
3									
4									
5		· · · · ·							
6									
7		· · · · · · · · · · · · · · · · · · ·							
8									
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11	20	Vieen / //			<u>.</u>				
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 $P_{i} = \frac{1}{2}$

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COPIES: WHITE — Landfarm	YELLOW — Custome	PINK Landfarm	GOLD — Trai
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		COMMERCIAL LA T-N-T Enviro #70 CR 405 •	ANDFA onmenta Lindrith, NN	RM Ti a l, Inc. 1 87029	CKET		Tic 4 1	ket No. . 57
Date:	10-3	<u> 9-08</u> Customer:	Nm	•	<u></u>			
Well Nar	ne & Num	ber: STAR LAKE	Com	p				
Trucking	Co.: <u>Fo</u>	te & BUSSUM		• 	_ Unit N	o.: <u>514</u>		
Driver (p	rint): <u>Be</u>	hemino 5 Villarias Cu	istomer Sigr	nature:				
Ordered	Ву:			_Delivery	Ticket N	o.: <u>14</u>	2000	
ITEM NO.	BBLS or (TRDS)	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20		1-1	552				
2	20		1-1	487			4	
3								
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8	20	CLEAN Fill						
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COPIES: V	WHITE Landfarm	YELLOW - Customer	PINK - Landfarm	GOLD — Transporter

		COMMERCIAL LA T-N-T Enviror #70 CR 405 • Lin	NDFA menta adrith, NN	RM T al, Inc. 1 87029	ICKET		тіс 41	ket No. . 50
Date:	10-3	0-08 Customer:N	m					
Well Na	me & Nun	nber: STAR LAKE	Som)	<i>o</i>				
Trucking	Co.: Fr	autzand Bursum (oust	ι	Unit N	o.: 5	17	
Driver (p	orint): E	This Haines Cust	omer Siar	nature:				
Ordered	ву:	man Ataria		Delivery	Ticket N	o.: <u> </u>	0.000	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20		1-1.	116			1	
2	20		1-1	304			V	
3								
4		· · ·						
5			-					
6					<u>,</u>			
7								
8	20	CLEAN Fill						
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15						· · · · · · · · · · · · · · · · · · ·		
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		COMMERCIAL LA T-N-T Environ #70 CR 405 • Li	NDFA nmenta ndrith, NN	RM TI al, Inc. 1 87029	CKEI	- · ·	Tici	(et No. 1946 - 1946 - 1946 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 - 1947 -
Date:	10-20	<u>1-03</u> Customer:	<u>p 54 </u>	PNI	<u> </u>	<u>3D</u>		
Well Nan	ne & Num	ber: Star Lake Compress	ne. Sta	tion			<u> </u>	
Frucking	Co.: <u>۲</u>	Deberg			_ Unit N	o.: <u>02</u>	·	
Driver (pr	rint):	unde Robison Cus	tomer Sigr	nature:			1	Jamas
Ordered	By: <u>-・</u> ろし	Charlie Dean		_Delivery	Ticket N	0.:_ <u>14</u> 8	107 11	
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Pinda Robison	1-1	116				
2	20	Acnola Robison	1-1	116				
3								
4								
5								
6								
7								
8	20	Clean Fill Fonda Robison						
9	20	Chem F. 11 Plinda Robison	_					
10								
11			_					
12			_					
13			-					
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		COIMINERCIAL LA T-N-T Enviror #70 CR 405 • Lin	INDFA Imenta Indrith, NN	. KIVI T I 1, Inc. 187029	ICKET	<u>9</u>	41	.43
Date: _/	0-2	9-08_Customer:	(=	30				
Well Nar	ne & Nun	nber: PNM starlake c	omp.					
Trucking	Co.:	Abberg			Unit N	o.: <u>56</u>	•	
Driver (p	rint): <u> </u>	obert Benjamin Cust	omer Sigr	ature:		-1-17	un il l	
Ordered	ву: <u>3</u> /	2 Charlie Dean		_Delivery	Ticket N	481 0.:_ <u>142</u>	13M0D 000	erg +*e
ITEM NO.	BBLS or YRDS.	DRIVER'S SIGNATURE	PAINT FILTER TEST RATIO	CHLORIDE RESULTS	LAB SAMPLE	REJECTED	PASSED	CELL
1	20	Robert Berling]-1	130			İ	
2								
3								
4								
5					·····			
6								. <u>.</u>
7								
8	20	Clean F. N. Robert Buyer	,					.
9	20	Clear I'll Botwerd Bijn	-					
10		· · · · · ·						<u> </u>
11								<u>. </u>
12		<u> </u>						
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14					- 5	,		÷
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PIES:	WHITE — Landfarm	YELLOW — Customer	PINK — Landfarm	GOLD — Transporter
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