

District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Avenue, Artesia, NM 88210
District III
1000 Rio Brazos Road, Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy Minerals and Natural Resources

Oil Conservation Division
1220 South St. Francis Dr.
Santa Fe, NM 87505

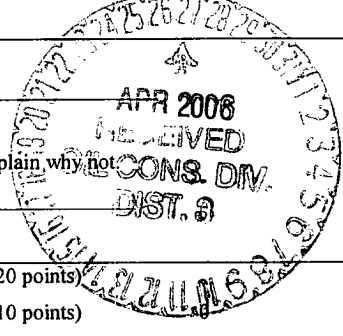
Form C-144
June 1, 2004

For drilling and production facilities, submit to appropriate NMOCD District Office.
For downstream facilities, submit to Santa Fe office

Pit or Below-Grade Tank Registration or Closure

Is pit or below-grade tank covered by a "general plan"? Yes ☐ No ☒

Type of action: Registration of a pit or below-grade tank ☐ Closure of a pit or below-grade tank ☒

Operator: <u>Dugan Production Corp</u> Telephone: <u>(505)325-1821</u> e-mail address: _____			
Address: <u>P.O. Box 420, Farmington, New Mexico 87401</u>			
Facility or well name: <u>Fahrenheit #2</u> API #: <u>30-039-23424</u> U/L or Qtr/Qtr <u>D</u> Sec <u>11</u> T <u>23N</u> R <u>6W</u>			
County: <u>Rio Arriba</u> Latitude <u>36.24413</u> Longitude <u>107.44480</u> NAD: 1927 ☐ 1983 ☐ Surface Owner Federal ☒ State ☐ Private ☐ Indian ☐			
Pit Type: Drilling ☐ Production ☒ Disposal ☐ Workover ☐ Emergency ☐ Lined ☐ Unlined ☒ Liner type: Synthetic ☐ Thickness _____ mil Clay ☐ Pit Volume <u>51 ±</u> bbl	Below-grade tank Volume: _____ bbl Type of fluid: _____ Construction material: _____ Double-walled, with leak detection? Yes ☐ If not, explain why, not _____		
Depth to ground water (vertical distance from bottom of pit to seasonal high water elevation of ground water.)	Less than 50 feet (20 points) 50 feet or more, but less than 100 feet (10 points) 100 feet or more (0 points)		
Wellhead protection area: (Less than 200 feet from a private domestic water source, or less than 1000 feet from all other water sources.)	Yes (20 points) No (0 points)		0
Distance to surface water: (horizontal distance to all wetlands, playas, irrigation canals, ditches, and perennial and ephemeral watercourses.)	Less than 200 feet (20 points) 200 feet or more, but less than 1000 feet (10 points) 1000 feet or more (0 points)		0
	Ranking Score (Total Points)		0

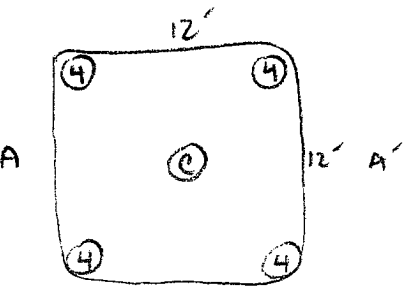
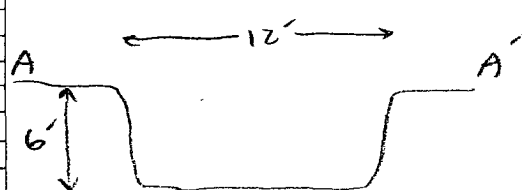
If this is a pit closure: (1) attach a diagram of the facility showing the pit's relationship to other equipment and tanks. (2) Indicate disposal location: (check the onsite box if you are burying in place) onsite ☒ offsite ☐ If offsite, name of facility _____. (3) Attach a general description of remedial action taken including remediation start date and end date. (4) Groundwater encountered: No ☒ Yes ☐ If yes, show depth below ground surface _____ ft. and attach sample results. (5) Attach soil sample results and a diagram of sample locations and excavations.

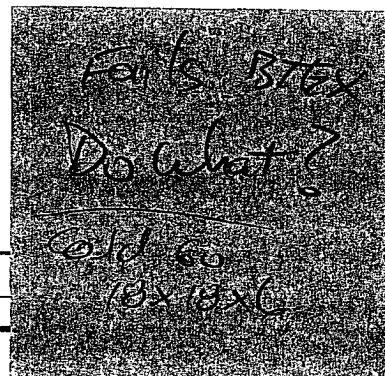
Additional Comments:
12' x 12' x 2'± deep unlined production pit, center located 75 feet North 17° East of wellhead. Pit excavated/sampled on 4/12/06.
Pit excavated to 12' x 12' x 6' deep to soils with no apparent discoloration. Removed soils proposed to be landfarmed on location.
Collect 4-point composite soil sample from sidewalls and pit center sample for laboratory testing.
See attached field sampling report and laboratory test reports. BLM on site to witness sampling.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. I further certify that the above-described pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒ , a general permit ☐ , or an (attached) alternative OCD-approved plan ☐ .		
Date: <u>4/26/06</u>	Printed Name/Title: <u>Jeff Blagg, Agent</u>	Signature: <u>Jeff Blagg</u>
Your certification and NMOCD approval of this application/closure does not relieve the operator of liability should the contents of the pit or tank contaminate ground water or otherwise endanger public health or the environment. Nor does it relieve the operator of its responsibility for compliance with any other federal, state, or local laws and/or regulations.		
Approval: DEPUTY OIL & GAS INSPECTOR, DIST. 3	Printed Name/Title: _____	Signature: <u>Brandon Lusk</u> Date: <u>APR 27 2006</u>

30-039-23424

36.24413 x 107.44180

CLIENT: <u>DUGAN</u>	BLAGG ENGINEERING, INC. P.O. BOX 87, BLOOMFIELD, NM 87413 (505) 632-1199	LOCATION NO: _____ COCR NO: <u>14644</u>																																
FIELD REPORT: PIT CLOSURE VERIFICATION		PAGE No: <u>1</u> of <u>1</u>																																
LOCATION: NAME: <u>FAHRENHEIT</u> WELL #: <u>2</u> TYPE: <u>TANK</u> QUAD/UNIT: <u>D</u> SEC: <u>11</u> TWP: <u>23N</u> RNG: <u>6W</u> PM: <u>NM</u> CNTY: <u>RA</u> ST: <u>NM</u> QTR/FOOTAGE: <u>980 Fm x 810 Fm</u> CONTRACTOR: <u>SIERRA (MARLB)</u>		DATE STARTED: <u>4/12/06</u> DATE FINISHED: <u>6/12/06</u> ENVIRONMENTAL SPECIALIST: <u>JCB</u>																																
EXCAVATION APPROX. <u>12</u> FT. x <u>12</u> FT. x <u>6</u> FT. DEEP. CUBIC YARDAGE: <u>21±</u> DISPOSAL FACILITY: <u>ON-SITE</u> REMEDIATION METHOD: <u>LF</u> LAND USE: <u>RANGE - BLM</u> LEASE: <u>NM 24458</u> FORMATION: <u>GAL/DK</u>																																		
FIELD NOTES & REMARKS: PIT LOCATED APPROXIMATELY <u>75</u> FT. <u>NITE</u> FROM WELLHEAD. DEPTH TO GROUNDWATER: <u>>100</u> NEAREST WATER SOURCE: <u>>1000</u> NEAREST SURFACE WATER: <u>>1000</u> NMOCD RANKING SCORE: <u>0</u> NMOCD TPH CLOSURE STD: <u>5000</u> PPM																																		
SOIL AND EXCAVATION DESCRIPTION: OVM CALIB. READ. = <u>53.3</u> ppm OVM CALIB. GAS = <u>100</u> ppm RF = 0.52 TIME: <u>0630</u> am/pm DATE: <u>4/12</u>																																		
SOIL TYPE: SAND (<u>SILTY SAND</u>) / SILT / SILTY CLAY / CLAY / GRAVEL / OTHER _____ SOIL COLOR: _____ COHESION (ALL OTHERS): NON COHESIVE (<u>SLIGHTLY COHESIVE</u>) / COHESIVE / HIGHLY COHESIVE CONSISTENCY (NON COHESIVE SOILS): LOOSE / FIRM / DENSE / VERY DENSE PLASTICITY (CLAYS): NON PLASTIC / SLIGHTLY PLASTIC / COHESIVE / MEDIUM PLASTIC / HIGHLY PLASTIC DENSITY (COHESIVE CLAYS & SILTS): SOFT / FIRM / STIFF / VERY STIFF / HARD MOISTURE: DRY (<u>SLIGHTLY MOIST</u>) / MOIST / WET / SATURATED / SUPER SATURATED DISCOLORATION/STAINING OBSERVED: <u>YES</u> / NO EXPLANATION - <u>MINOR 2'-6" ; None @ 6"</u> HC ODOR DETECTED: <u>YES</u> / NO EXPLANATION - <u>MINOR</u> SAMPLE TYPE: GRAB / COMPOSITE - # OF PTS. _____ ADDITIONAL COMMENTS: <u>12' x 12' x 2' deep Unlined Pit.</u> <u>USE BACKHOE to Dig into Pit.</u> <u>SAMPLING WITNESSED BY BLM</u>																																		
FIELD 418.1 CALCULATIONS																																		
SCALE  0 10 FT	<table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>SAMP. TIME</th> <th>SAMP. ID</th> <th>LAB NO.</th> <th>WEIGHT (g)</th> <th>mL FREON</th> <th>DILUTION</th> <th>READING</th> <th>CALC. (ppm)</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td><td> </td></tr> </tbody> </table>		SAMP. TIME	SAMP. ID	LAB NO.	WEIGHT (g)	mL FREON	DILUTION	READING	CALC. (ppm)																								
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ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

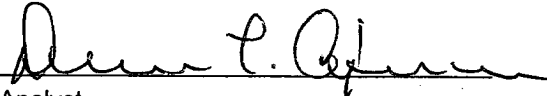
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Laboratory Number:	36781	Date Sampled:	04-12-06
Chain of Custody No:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Extracted:	04-13-06
Preservative:	Cool	Date Analyzed:	04-15-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

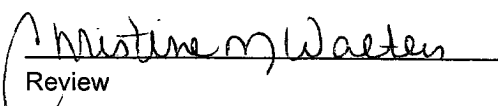
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	0.6	0.2
Diesel Range (C10 - C28)	ND	0.1
Total Petroleum Hydrocarbons	0.6	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Earthen Pit Closures C @ 6'**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

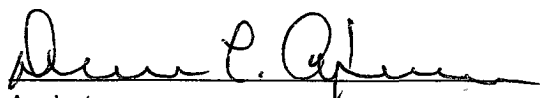
Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Laboratory Number:	36782	Date Sampled:	04-12-06
Chain of Custody No:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Extracted:	04-13-06
Preservative:	Cool	Date Analyzed:	04-15-06
Condition:	Cool and Intact	Analysis Requested:	8015 TPH

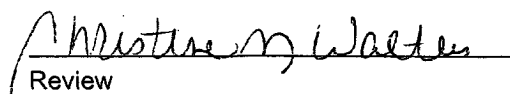
Parameter	Concentration (mg/Kg)	Det. Limit (mg/Kg)
Gasoline Range (C5 - C10)	151	0.2
Diesel Range (C10 - C28)	372	0.1
Total Petroleum Hydrocarbons	523	0.2

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: **Earthen Pit Closures 4-Point @ 6'**


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Lab ID#:	36781	Date Sampled:	04-12-06
Sample Matrix:	Soil	Date Received:	04-13-06
Preservative:	Cool	Date Analyzed:	04-13-06
Condition:	Cool and Intact	Chain of Custody:	14644

Parameter

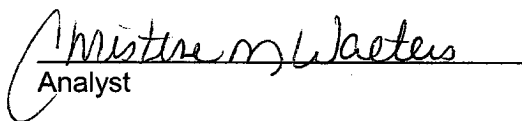
Concentration (mg/Kg)

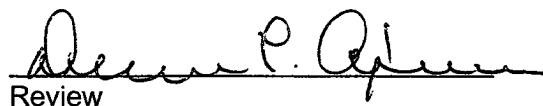
Total Chloride

1,790

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earthen Pit Closures C @ 6'


Analyst


Review

ENVIROTECH LABS

PRactical SOLUTIONS FOR A BETTER TOMORROW

Chloride

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Lab ID#:	36782	Date Sampled:	04-12-06
Sample Matrix:	Soil	Date Received:	04-13-06
Preservative:	Cool	Date Analyzed:	04-13-06
Condition:	Cool and Intact	Chain of Custody:	14644

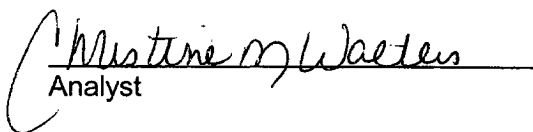
Parameter	Concentration (mg/Kg)
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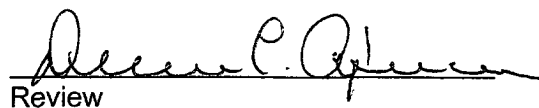
Total Chloride

2,160

Reference: Standard Methods For The Examination of Water And Waste Water", 18th ed., 1992.

Comments: Earthen Pit Closures 4-Point @ 6'


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Laboratory Number:	36781	Date Sampled:	04-12-06
Chain of Custody:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Analyzed:	04-15-06
Preservative:	Cool	Date Extracted:	04-13-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	9.2	1.8
Toluene	32.5	1.7
Ethylbenzene	28.9	1.5
p,m-Xylene	108	2.2
o-Xylene	38.9	1.0
Total BTEX	218	

ND - Parameter not detected at the stated detection limit.

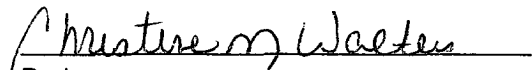
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	97.0 %
	1,4-difluorobenzene	97.0 %
	Bromochlorobenzene	97.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Earthen Pit Closures C @ 6'


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	Blagg / Dugan	Project #:	94034-010
Sample ID:	Fahrenheit 2 - Tank	Date Reported:	04-15-06
Laboratory Number:	36782	Date Sampled:	04-12-06
Chain of Custody:	14644	Date Received:	04-13-06
Sample Matrix:	Soil	Date Analyzed:	04-15-06
Preservative:	Cool	Date Extracted:	04-13-06
Condition:	Cool & Intact	Analysis Requested:	BTEX

Parameter	Concentration (ug/Kg)	Det. Limit (ug/Kg)
Benzene	330	1.8
Toluene	1,820	1.7
Ethylbenzene	1,500	1.5
p,m-Xylene	4,490	2.2
o-Xylene	1,510	1.0
Total BTEX	9,650	

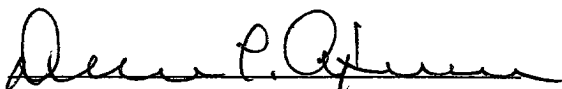
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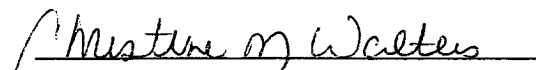
Surrogate Recoveries:	Parameter	Percent Recovery
	Fluorobenzene	99.0 %
	1,4-difluorobenzene	99.0 %
	Bromochlorobenzene	99.0 %

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Method 8021B, Aromatic Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: Earthen Pit Closures 4-Point @ 6'


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA METHOD 8021 AROMATIC VOLATILE ORGANICS

Client:	N/A	Project #:	N/A
Sample ID:	04-15-BTEX QA/QC	Date Reported:	04-15-06
Laboratory Number:	36773	Date Sampled:	N/A
Sample Matrix:	Soil	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-15-06
Condition:	N/A	Analysis:	BTEX

Calibration and Detection Limits (ug/L)	I-Cal RF:	C-Cal RF:	%Diff.	Blank Conc	Detect. Limit
		Accept. Range 0 - 15%			
Benzene	6.3642E+007	6.3770E+007	0.2%	ND	0.2
Toluene	6.5544E+007	6.5675E+007	0.2%	ND	0.2
Ethylbenzene	4.4630E+007	4.4719E+007	0.2%	ND	0.2
p,m-Xylene	1.1757E+008	1.1780E+008	0.2%	ND	0.2
o-Xylene	5.6023E+007	5.6135E+007	0.2%	ND	0.1

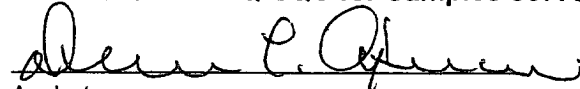
Duplicate Conc. (ug/Kg)	Sample	Duplicate	%Diff.	Accept Range	Detect Limit
Benzene	8.2	8.2	0.0%	0 - 30%	1.8
Toluene	22.2	22.1	0.5%	0 - 30%	1.7
Ethylbenzene	21.3	21.3	0.0%	0 - 30%	1.5
p,m-Xylene	135	134	0.3%	0 - 30%	2.2
o-Xylene	32.9	32.8	0.3%	0 - 30%	1.0

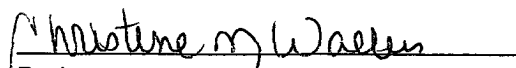
Spike Conc. (ug/Kg)	Sample	Amount Spiked	Spiked Sample	% Recovery	Accept Range
Benzene	8.2	50.0	58.2	100.0%	39 - 150
Toluene	22.2	50.0	72.1	99.9%	46 - 148
Ethylbenzene	21.3	50.0	71.2	99.9%	32 - 160
p,m-Xylene	135	100	234	99.8%	46 - 148
o-Xylene	32.9	50.0	82.7	99.8%	46 - 148

ND - Parameter not detected at the stated detection limit.

References: Method 5030B, Purge-and-Trap, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.
Method 8021B, Aromatic and Halogenated Volatiles by Gas Chromatography Using Photoionization and/or Electrolytic Conductivity Detectors, SW-846, USEPA December 1996.

Comments: QA/QC for Samples 36773 - 36782.


Analyst


Review

ENVIROTECH LABS

PRACTICAL SOLUTIONS FOR A BETTER TOMORROW

EPA Method 8015 Modified Nonhalogenated Volatile Organics Total Petroleum Hydrocarbons

Quality Assurance Report

Client:	QA/QC	Project #:	N/A
Sample ID:	04-15-06 QA/QC	Date Reported:	04-15-06
Laboratory Number:	36773	Date Sampled:	N/A
Sample Matrix:	Methylene Chloride	Date Received:	N/A
Preservative:	N/A	Date Analyzed:	04-15-06
Condition:	N/A	Analysis Requested:	TPH

	I-Cal Date	I-Cal RF	C-Cal RF	% Difference	Accept Range
Gasoline Range C5 - C10	02-04-05	9.9639E+002	9.9739E+002	0.10%	0 - 15%
Diesel Range C10 - C28	02-04-05	9.9471E+002	9.9671E+002	0.20%	0 - 15%

Blank Conc. (mg/L - mg/Kg)	Concentration	Detection Limit
Gasoline Range C5 - C10	ND	0.2
Diesel Range C10 - C28	ND	0.1
Total Petroleum Hydrocarbons	ND	0.2

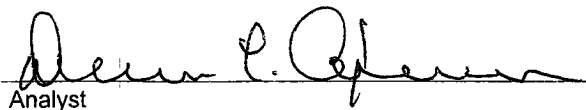
Duplicate Conc. (mg/Kg)	Sample	Duplicate	% Difference	Accept Range
Gasoline Range C5 - C10	4.9	4.9	0.0%	0 - 30%
Diesel Range C10 - C28	298	296	0.6%	0 - 30%

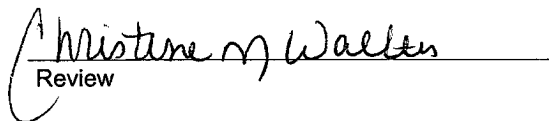
Spike Conc. (mg/Kg)	Sample	Spike Added	Spike Result	% Recovery	Accept Range
Gasoline Range C5 - C10	4.9	250	254	99.8%	75 - 125%
Diesel Range C10 - C28	298	250	547	99.9%	75 - 125%

ND - Parameter not detected at the stated detection limit.

References: Method 8015B, Nonhalogenated Volatile Organics, Test Methods for Evaluating Solid Waste, SW-846, USEPA, December 1996.

Comments: QA/QC for Samples 36773 - 36782.


Analyst


Review