

BLASTING

CHAPTER 7

CHAPTER 7

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Blasting crews consult drilling and loading charts in the manual referred to above to determine the approximate amount of explosive, stemming and decking required for the operations stay ahead of excavators a sufficient distance to prepare enough material to meet production requirements.

Vertical or angle drilling is used at Kayenta Mine. A record of the number and depth of drill holes is kept by the driller (see Figures 1 and 2). Typically, the drilling and spacing of drill holes within typical patterns are contained in charts, which have been developed for the various conditions experienced in the Black Mesa operation. Each lead drilling and shooting foreman has a copy of these charts.

and physical characteristics of the material to be fragmented, the size of the excavator and loader and drill bit diameter. Examples of typical patterns are shown in Tables 1, 1A and 1B. Table 1B will be given to the drillers and pit bosses for reference. The burden and spacing of drill holes with typical patterns are contained in charts, which have been developed for the various conditions experienced in the Black Mesa operation. Each lead drilling and shooting foreman has a copy of these charts.

Blasting Procedures

respective crews. supported by a highwall overburden drill, parting drill, coal drill, ripper dozer and be utilized to assist the excavator in removal of overburden. Each major excavator is sufficient to satisfy coal supply obligations. In addition, "blast casting" methods will parting material and coal ahead of excavation and loading equipment so that production is feet in thickness. The objective of this process is to provide fragmented overburden, equipped dozer. Ripping is typically limited to partings and coal seams less than three when possible, thin partings and coal seams are fragmented by ripping with a ripper-facilities. The majority of the fragmentation is accomplished by the use of explosives. fragmented prior to loading of coal into haulage trucks for transport to transportation can be handled efficiently by excavation equipment. Likewise, the coal must be prior to removal, the overburden and parting material must be fragmented to a size, which

Introduction

Example Drill Hole Pattern Sizes Utilized
at the Black Mesa Mining Complex (Anfo)

ANFO
* PATTERN SIZE

COAL: DEPTH

For 4-3/4" diameter hole: 3' - 11' 12' - 15'

OVERBURDEN AND PARTING: 9' x 9' 9' x 12'

For 5-7/8" diameter hole: 2' - 10' 11' - 13' 14' - 16' 17' - 20' 21' - 25'

For 9-0" diameter hole: 0' - 9' 10' - 13' 14' - 16' 17' - 20' 21' - 25'

For 10-5/8" overburden drill: 3' - 9' 10' - 13' 14' - 16' 17' - 20' 21' - 25'

For 12-1/4" diameter hole: 10' - 13' 14' - 17' 18' - 21' 22' - 25' 26' - 30' Over 30'

* Pattern size will vary with types of explosive material used, the material being fragmented, and the explosive manufacturer's recommendation.

TABLE 1A

Example Drill Hole Pattern Sizes Utilized
at the Black Mesa Mining Complex (Emulsion)

EMULSION
PATTERN SIZE *

OVERBURDEN AND PARTING:

DEPTH	PATTERN SIZE *
6' - 7'	12' x 15'
6' - 12'	15' x 18'
10' - 20'	18' x 21'

For 9-0" diameter hole:

5' - 9'	15' x 18'
10' - 13'	18' x 21'
12' - 18'	21' x 24'
18' - 23'	24' x 27'
22' - 29'	27' x 30'
27' - 31'	30' x 33'
32' - 35'	30' x 35'

For 10-5/8" overburden drill:

12' - 13'	21' x 24'
12' - 19'	24' x 27'
16' - 25'	27' x 30'
20' - 31'	30' x 33'
28' - 33'	33' x 36'
34'	33' x 38'
35' - 40'	35' x 40'

For 12-1/4" diameter hole:

20' - 21'	30' x 33'
22' - 30'	30' x 35'
25' - 35'	33' x 38'
30'	36' x 40'
30' - 39'	36' x 42'
35' - 39'	38' x 44'
39'	40' x 46'

* Pattern size will vary with types of explosive material used, the material being fragmented, and the explosive manufacturer's recommendation.

19	27 x 27	513	2.0 / 256#	11.2	11.2 / 19 = .59
18	27 x 27	486	2.1 / 231#	11.0	11 / 19 = .58
17	27 x 27	459	2.2 / 208#	10.7	10.7 / 19 = .56
16	27 x 27	432	2.3 / 188#	10.3	10.3 / 19 = .54
15	24 x 24	320	2.0 / 160#	10.2	10.2 / 17 = .60
14	24 x 24	299	2.3 / 132#	10.0	10 / 17 = .59
13	24 x 24	277	2.4 / 116#	9.5	9.5 / 17 = .56
12	21 x 21	196	2.0 / 98#	9.0	9 / 14.8 = .61
11	21 x 21	180	2.25 / 80#	8.6	8.6 / 14.8 = .58
10	21 x 21	163	2.4 / 68#	8.0	8 / 14.8 = .54
9	18 x 18	108	2.25 / 48#	7.5	7.5 / 12.7 = .59
8	18 x 18	96	2.4 / 40#	6.8	6.8 / 12.7 = .53
7	15 x 15	58	2.03 / 25#	6.25	6.25 / 10.6 = .589
6	15 x 15	50	2.5 / 20#	5.4	5.4 / 10.6 = .51
5	15 x 15	42	2.5 / 16#	4.5	4.5 / 10.6 = .42

DEPTH	PATTERN	YARDAGE	RATIO	STEM	STEM BURDEN
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SQUARE PATTERN LOADING CHART - 9" PARTING

TABLE 1B
 Example Drill Hole Pattern Size
 For 9" Diameter Holes in Parting Material

Blasthole. The charts specify these parameters based upon blasthole diameter, depth, pattern size, and presence of cap rock.

Bulk prell or emulsified products are used in dry blastholes. High density bagged prell or emulsified products are used in wet holes. Primary detonation is by Ensin Bickford noiseless NONEL. Electric blasting caps and primer cord are used for special applications.

Cast blasting, as well as conventional blasting is conducted. Approximately 5 percent of the total material shot at Kayenta Mines is cast blasted. The design procedures for cast blasting are similar to those for conventional blasting. Since cast blasting may fragment and fracture recoverable coal seams more than conventional blasting, and since PWCC desires to maximize the recovery of the coal resource, additional blast planning is undertaken. To minimize adverse fracturing and fragmentation impacts, blasting decks are installed in blast holes that are to be cast blasted. The upper deck in the blast hole is delayed to discharge before the bottom deck in order to reduce the confinement of the fragmentation forces in the bottom of the hole and thereby reduce the upon the coal seam minimizing coal loss. The lower decks are typically loaded with substantially less weight of explosives than the upper deck. Due to variability of overburden and parting thickness, decking can occur at any depth. In addition to the stemming placed at the top of the blasthole, stemming-type backfill material is placed in the bottom of the holes to further reduce the effects upon the coal seam and minimize any overbreakage at the toe. When cast blasting is to be conducted above coal seams that have exhibited brittle characteristics, blast hole drilling is terminated before the coal seam is encountered in order to cushion the coal from the effects of blasting.

Coal drilling and blasting procedures are essentially the same as those described above relative to overburden and parting except that no cast blasting is performed. Dirt, rock, and other debris are removed from the exposed coal surface prior to drilling. Electric blasting caps are used to detonate the explosives.

Blasting Limitations

Please refer to Attachment 5, Blast Monitoring Plan, for airblast monitoring and reporting requirements.

Ground Vibration. Peabody will utilize the scale-distance equation given in 30 CFR 816.67(d)(3) to determine the allowable charge weight of explosives to be detonated in any 8-millisecond period or the seismic monitoring at the closest structure if the blast will exceed the requirements of 30 CFR 816.67(d)(3).

The result of the 1985 airblast monitoring conducted on the Black Mesa may be found in Attachment 1. The monitoring took place on August 6, 1985 near the U-21 mining area. The dwelling was 3,120 feet from the blast site and the airblast measured 107dB. The applicable maximum level is 129 dB. The more recent results of the airblast monitoring are available for inspection at the mine site office.

airblast whenever the scale distance is exceeded.

located at least one-half mile from blasting areas. Therefore, Peabody will monitor and dwellings. Further, families who inhabit dwellings within the permit area are Use Map and Drawing No. 94720, Preblast Survey Site Map, show the locations of structures Mine operation is located in a remote, sparsely populated area. Drawing No. 85100, Land Institutional building except at such structures purchased by Peabody. Peabody's Kayenta the location of any dwelling, public building, school, church or community or reduce air blast effects and noise. Airblast will not exceed the limits in Table 2 at Airblast. Electric blasting caps and noiseless NONEL detonating equipment is utilized to

to the blasting report.

residence (determined in drawing 94700) and produce a record of monitoring to be attached the scale distance is exceeded, PWCC will use a portable seismograph at the closest determining the maximum pounds of explosive detonated per 8 millisecond period. Anytime program. PWCC will utilize the scaled distance formula 30 CFR 816.67(d)(3) for Beginning in July, 2010, Peabody will terminate the continuous monitoring and reporting

overpressure records, and a cover letter summarizing the data.

Blasting Monitoring Program. Peabody implemented a continuous ground vibration and air OSM's Albuquerque Field Office and the Western Support Center. These reports include 816.67(b)(1), the regulatory limit is 133dB. Monthly and quarterly reports were sent to second peak particle velocity and 132.6 dB air overpressure. In accordance with 30 CFR consultation with OSM (see Drawing No. 94700). The trigger levels are 0.50 inches per monitors and threshold trigger levels for the monitoring program were determined in overpressure monitoring program on April 15, 1994. The locations for the permanent

TABLE 2

Airblast Limits

Lower Frequency Limit of Measuring System, in Hz ($\pm 3\text{dB}$)	Maximum Level in dB
0.1 Hz or lower - Flat response	134 peak
2 Hz or lower - Flat response	133 peak
6 Hz or lower - Flat response	129 peak
C - Weighted - Slow response	105 DBC

Rebody publishes a blasting schedule in a newspaper having general circulation in the area in which Kayenta Mine is located. Additionally, blasting schedules are delivered to individuals living within one-half mile of the blasting area and in the vicinity of the blasting area. The blasting schedule is published and distributed every twelve months and at least ten days but not more than 30 days before blasting whenever the area covered by the schedule changes or whenever periods for blasting significantly differ from the prior announcement. A copy of the most recent blasting schedule and an

Figure 1.

required the blast. This documentation shall be provided in the blasting statement, the unscheduled blast, as well as the conditions of health and safety or emergency that blasting actions. When an unscheduled blast occurs, Rebody will document the reason for blasting only where public or operator health and safety so require and for emergency blasting will be conducted only between sunrise and sunset. Unscheduled blasts are

dictated by the Mining Plan.

must be shot prior to removal. Therefore, blasting of these materials must occur as requirements, and maximize coal recovery. Essentially, all parting material and coal strict sequence and timely fashion in order to maintain production, meet coal quality loading, and hauling equipment require that the parting material and coal be removed in a The mining of multiple coal seams and the associated multiple pieces of excavation,

Blasting Schedule

or beyond the permit boundary.

distance to the nearest dwelling or other occupied structure, beyond the area of control blasting operations will not be cast from the blasting site more than one-half the to substantially reduce the occurrence of fly rock. Fly rock which may result from Fly Rock. Adequate stemming of the burden is loaded into blastholes prior to detonation

reporting requirements.

Please refer to Attachment 5, Blast Monitoring Plan, for vibration monitoring and

3) includes information applicable to seismic monitoring. Either method could be applied so as to protect the facilities and maintain ground vibration below limits identified in 30 CFR 316.67(d). The blasting statement (Figure

Kayenta Mine is an existing operation and blasting is being conducted within current mining areas. Therefore, the schedule for preblast surveys contained in 30 CFR 816.62 is not directly applicable as written. Peabody will discuss the application of preblast survey requirements to existing mining areas (J-19, J-21, and N-9) with OSM and agrees to negotiate a schedule of activities that will result in the conduct of preblast surveys for residents or owners of dwellings or other structures located

Preblast Surveys

No site specific blast designs have been included in this plan since Peabody does not anticipate blasting operations to be conducted within 1,000 feet of any building used as a dwelling, public building, school, church, or community or institutional building. Should this situation be expected to occur, a blast design will be developed and submitted to OSM for approval prior to the initiation of such blasting operations.

Blast Designs

All blasting operations are conducted under the direct supervision of competent, trained and experienced personnel with proven work records who understand the hazards involved. Upon promulgation of a Federally-administered Blaster certification program, Peabody implemented a certified blaster's program which complies with the requirements contained therein. During the entire drilling, blasting and detonation sequence, the qualified Blaster-in-Charge is solely responsible for directing the Company's employees in all aspects of the drilling, blasting and detonation sequence. Persons responsible for blasting operations at a blasting site are familiar with the blasting plan and applicable performance standards. Prior to the detonation, a Blaster-in-Charge and at least one other qualified person will be present at the firing of a blast. Additional qualified personnel will be present, if required, to visually inspect the potential blast area, and to monitor and control access in the potential blast area. The blaster-in-charge will be a certified blaster and his/her name and license number will be recorded on the blasting statement (see Figure 1).

Blasters

affidavit of publication may be found in Attachment 2.

within one-half mile of these active mining areas where such surveys are requested and have not been previously conducted.

Peabody typically relocates residents to an agreed upon location that is more than one-half mile from any anticipated blasting, prior to blasting occurring within one-half mile of the residence. Negotiations with residents are conducted in advance of blasting activities, with direct assistance of Tribal representatives. Improvement assessments are conducted by local commercial assessors to determine an equitable valuation of structures in order to adequately compensate the resident for the relocation. Should relocation not occur, and blasting is to be conducted within one-half mile of the residence, blasting will be conducted in accordance with appropriate sections of this chapter.

Notification was made in writing on January 11, 1985 to all residents or owners of dwellings or other structures located within one-half mile of the J-21 permit area that blasting in that coal mining area would commence on February 13, 1985. A sample copy of the notification and acknowledgement may be found as Attachment 3. No request for surveys was received prior to the initiation of blasting. Peabody obtained written consents to perform blasting surveys from the owners of three dwellings in the vicinity of the J-21 permit area. These surveys were conducted on September 4, 1985. Two were conducted on structures, which were completed after initiation of blasting activities in the J-21 permit area. Since 1985, condition surveys of non-PWCC owned structures located on or within one-half mile of the mine permit areas have been offered to owners and/or residents of the structures as required in 30 CFR 816.62. One hundred ninety structures were inspected in 1994. New structures are offered condition surveys on a periodic basis. The inspections are on file with OSM and PWCC; copies of each inspection are supplied to each structure owner. Condition surveys consist of a written report and still photographs documenting the general condition of the structure inspected. Condition surveys are used for comparative purposes should a damage investigation be required. Drawing No. 94720, Preblast Survey Site Map, shows the location of the surveys and Attachment 6 lists current and historical resident locations.

Peabody will notify in writing at least 30 days before initiation of blasting in the J-19, J-21, and N-9 mining areas, all residents or owners of dwellings or other structures located within one-half mile of the blasting area how to request a preblasting survey.

Access to the blasting area is controlled by visual inspection and by insuring that all of the blasting area is clear of all livestock, or unauthorized persons. A qualified person, who is familiar with blasting and shooting procedures, is responsible to perform the visual inspection, assessing the presence of unauthorized humans, livestock and property, etc. in the potential blasting area and to block and monitor access, or barricading roads leading into the blasting area. It is Company Policy for all non-Pit Operations personnel to contact the Pit Supervisor, Dragline Operator or the Blaster-in-

Audible warning and all clear signals are given prior to and following a blast, respectively. Warning and all clear signals are explained on the blasting warning signs, the signs located at the main entrances to the mining complex and on bulletin boards in certain buildings, which the general public may frequent. The signals are also explained in the blasting schedule, which is published and distributed as explained above.

Blasting warning signs have been placed along the edge of the permit boundaries, at points of access that could reasonably be expected to be used by the general public. In addition, around the perimeter of the blasting area, "Blasting Area" signs will be installed along the edge of any blasting area that comes within 100 feet of any public road right-of-way, and at the point where any other road provides access to the blasting area (area of potential flyrock hazard). Many roads entering or traversing the permit area and leasehold are "Jeep trails" or light-use roads infrequently used by a very limited number of people and typically these roads will be barricades, bermed, provided with a locked gate or any appropriate methods to prevent access where these roads enter the potential blast area. Prior to each blast, leadby personnel will identify the road(s), which remain traversable into the potential blast area, inspect this road(s) and control access into the blast area during the detonation sequence. Blasting area signs are periodically moved to effectively delineate blasting areas. A description of the signs may be found in Chapter 25. The location of the blasting signs will change periodically as indicated above.

Blasting Signs, Warnings and Access Control

Any surveys requested more than ten days before the planned initiation of blasting will be completed before blasting begins. Surveys will be performed upon written request. A written report will be prepared and a copy will be submitted to OSM and the person requesting the survey.

Charge prior to entering the Pit area and potential blast area. Once a person is within the potential blast area, this person will continually monitor only the Operation's radio channel frequency applicable to this Pit area. This radio channel frequency will be utilized for all communications during the blasting sequence, so that all company radios are tuned to the proper channel when persons are in the potential blasting area. Fluorescent orange traffic cones and plastic tapes are used to identify blasting areas in which holes have been loaded, charged, and not yet detonated. Boreholes are not considered charged until a surface detonator is introduced into the initiation system. The all clear signal is given only after the potential blast area has been checked to insure that no unusual hazards such as slides or undetonated charges exist.

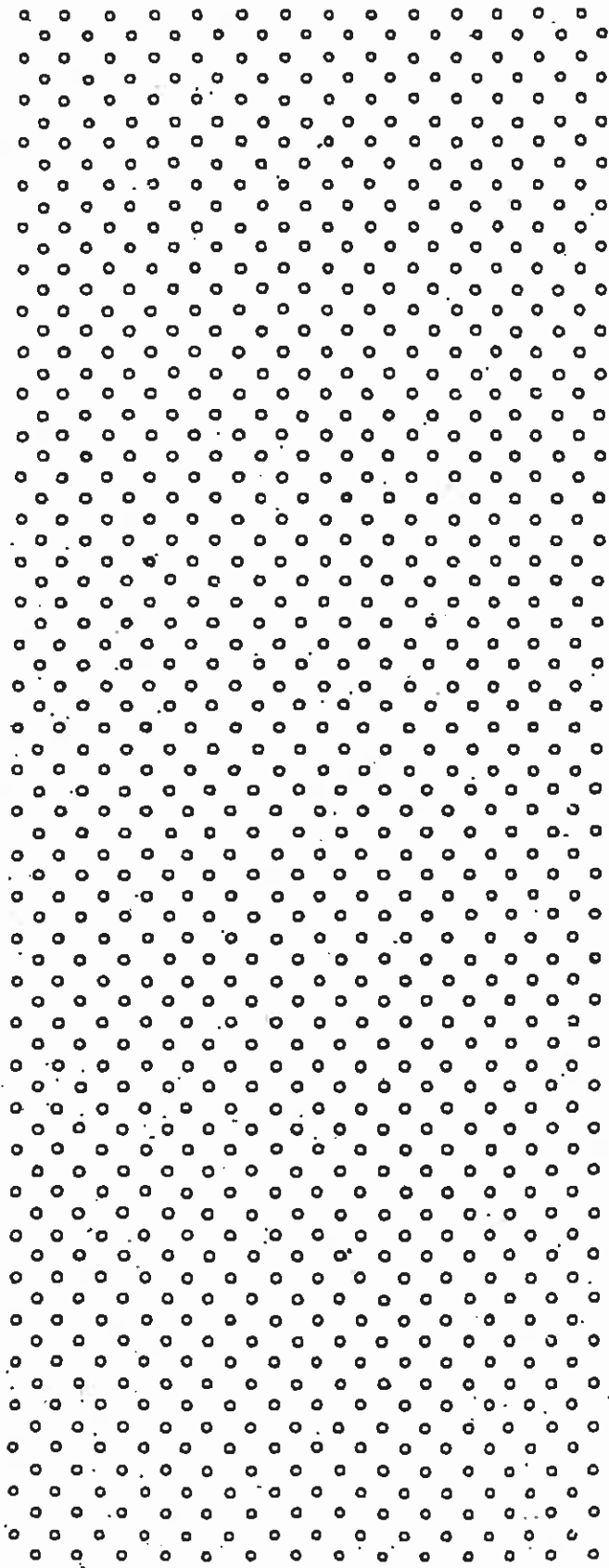
During the entire drilling, blasting and detonation sequence, the qualified Blaster-in-Charge is solely responsible for directing the Company's employees in all aspects of the drilling, blasting and detonation sequence. When an area is ready to blast, the Blaster-in-Charge will inspect the site. The Blaster-in-Charge will then request the assistance of the appropriate qualified Company employees (i.e. Blockers) to visually inspect the potential blast area and to block and monitor access. The Blaster-in-Charge will inspect the proposed blast area to verify the blast area is clear and to verify the pattern is ready to detonate. If the pattern is ready, the Blaster-in-Charge and all of the Blockers will check for human activities, livestock and property within the potential blast area around the drill pattern. After all of the area is cleared and all of the Blockers and Blaster-in-Charge are in a safe position, the Blaster-in-Charge will request on the Company radio frequency for this Pit area an all clear response from all of the Blockers. If everything is ready, the Blaster-in-Charge will complete the final connection a safe distance away from the shot. Then, the Blaster-in-Charge will call or designate the appropriate Mine personnel, who, over the Mine radio on the radio frequency for this blast area, will identify the type of shot, location, and request for radio silence. On the radio, the appropriate Mine personnel will repeat the request for radio silence, repeat the type of shot, and repeat the location of the proposed blast. The Blockers now confirm to the Blaster-in-Charge that the area is cleared and ready for blasting. The Blaster-in-Charge calls to initiate the pre-blast audible signal: five signals on an audible warning signal devices; approximate two minute pause; and then ten audible signals on the audible warning signal devices. The signal will be audible for at least one-half mile from the point of the blast. The primary blasting warning signal devices utilized will be a 100-watt or greater audible speaker warning device(s) and the dragging signal. Portable audible warning device assigned to qualified Company employees surrounding the perimeter of the blast area, plus the dragging signal will be utilized as backup warning devices or

to assist the primary audible speaker warning device(s); however, in either procedure, the signal will be audible at least one-half mile from the point of the blast. If the shot is still clear, the Blaster-in-charge will connect the initiating system to the detonating device and wait approximately one additional minute after the end of the ten signals. The Blaster-in-charge will again contact all of the Blockers to verify all of the blast area is clear. Once all Blockers confirm the area is clear, the Blaster-in-charge calls over the Mine radio. He says that there is going to be a (type) shot at (gives location) and "Fire in the Hole". The Blaster-in-charge then charges the initiating system and detonates the blast. The Blaster-in-charge then calls the Blockers and confirms all personnel are safe and the area is still clear. Once the Blockers respond, the Blaster-in-charge calls the appropriate Mine personnel and gives the time of the shot, confirms the shot has been fired, and the Mine personnel can resume normal radio communications. The Blaster-in-charge and the necessary Blockers, then go back into the blast area to check the shot. If everyone confirms the area is safe to reenter, the Blaster-in-charge requests the audible warning signal devices are blasted with one long signal. Finally, the Blaster-in-charge calls on the Mine radio the appropriate Mine personnel and informs them the area has been checked, the area is safe to reenter, and the appropriate Mine person repeats this information over the Mine radio.

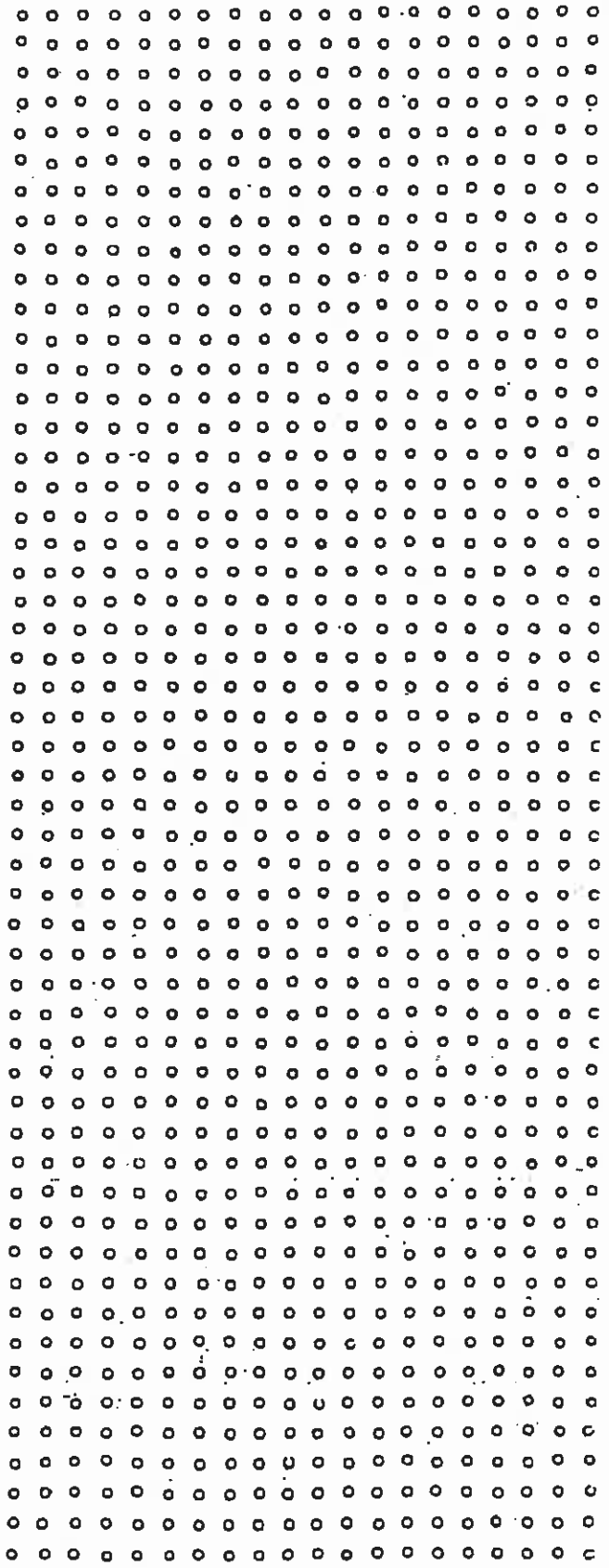
Records

The blasting forms shown in Figures 1 and 2 are completed for each blast and retained for a period of three years following the date of the blast. Copies of these records are maintained at Kayenta Mine and are made available for inspection. Shot pattern examples are included in this chapter on pages 17 through 20.

Please refer to Attachment 5, Blast Monitoring Plan, for additional recordkeeping and reporting requirements.



(BLOCKED)



SKETCH OF DRILL PATTERNS

Figure 2. Blasting Report
 Mine
 LOADING SHEET

Location _____ Drill No. _____

Ramp _____ Date Loaded _____ Shift 1st 2nd 3rd

Coal Part _____ Date Shot _____

Excavator _____ Coal Seam: _____

Cast _____ Truck Number: _____

OB/HW _____ Blasting Ratio _____

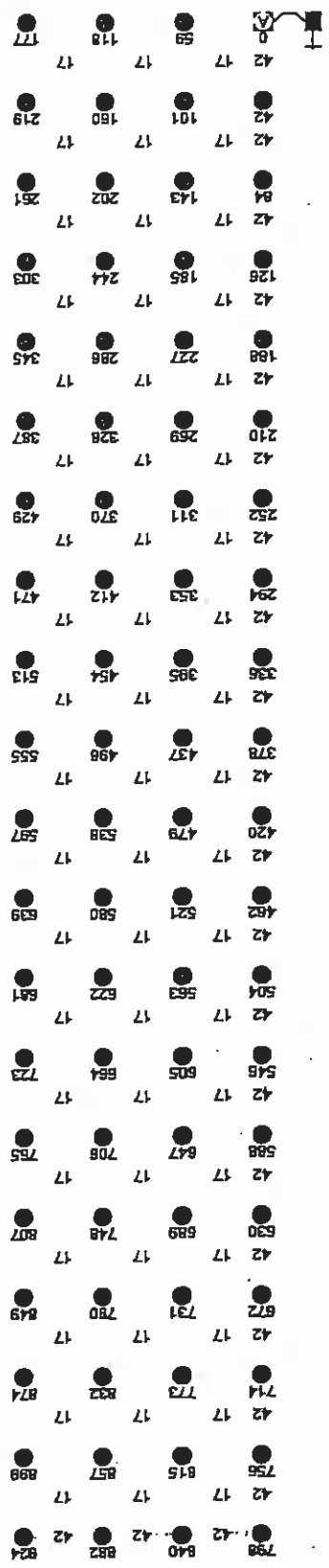
Percentage of ANFO/Emission _____

Number of Holes	Hole Depth	Nitrate Blend 62/38%	ANFO 100%	Other Blend	Boosters	Cord	Column Explosive	Stemming Feet	ITEM	QTY	RETURNED	USED
									Black CAPS/BST			
									LP-12			
									LP-8			
									A-Card			
									Zap Card			
									LD Card			
									DELAYS:			
									Blasting Cap			
									17ms/40"			
									42ms/40"			
									(overhaul)			
									DOWN HOLE DELAYS			
									150ms			
									175ms			
									250ms			
									300ms			
									400ms			
									450ms			
									600ms			
									800ms			

Shot Pattern Examples:

- Parting or Shot to Stand
- Cast Shot
- Coal Shot

All numbers are in milliseconds(ms). Numbers on lines are surface delays(ms) between holes. Holes with alpha characters denote groups of the maximum number of holes that fire within 5ms. Numbers above holes are accumulated times(ms) to detonation.



Date:

Pit:

Ramp:

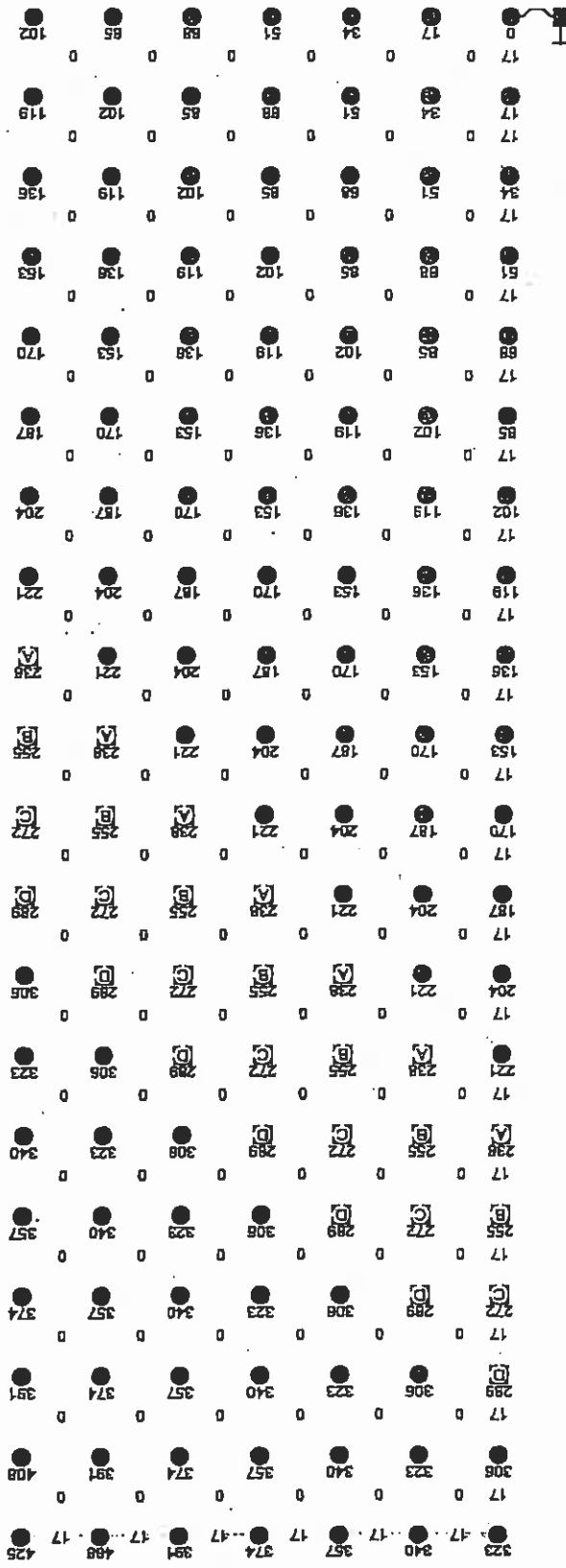
Shot:

Page 1 of 1

473	150	300	450	800	1000
474	150	300	450	800	1000
475	150	300	450	800	1000
476	150	300	450	800	1000
477	150	300	450	800	1000
478	150	300	450	800	1000
479	150	300	450	800	1000
480	150	300	450	800	1000
481	150	300	450	800	1000
482	150	300	450	800	1000
483	150	300	450	800	1000
484	150	300	450	800	1000
485	150	300	450	800	1000
486	150	300	450	800	1000
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570	150	300	450	800	1000
571	150	300	450	800	1000
572	150	300	450	800	1000
573	150	300	450	800	1000
574	150	300	450	800	1000
575	150	300	450	800	1000
576	150	300	450	800	1000
577	150	300	450	800	1000
578	150	300	450	800	1000
579	150	300	450	800	1000
580	150	300	450	800	1000
581	150	300	450	800	1000
582	150	300	450	800	1000
583	150	300	450	800	1000
584	150	300	450	800	1000
585	150	300	450	800	1000
586	150	300	450	800	1000
587	150	300	450	800	1000
588	150	300	450	800	1000
589	150	300	450	800	1000
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591	150	300	450	800	1000
592	150	300	450	800	1000
593	150	300	450	800	1000
594	150	300	450	800	1000
595	150	300	450	800	1000
596	150	300	450	800	1000
597	150	300	450	800	1000
598	150	300	450	800	1000
599	150	300	450	800	1000
600	150	300	450	800	1000

All numbers are in milliseconds(ms). Numbers above holes are accumulated times(ms) to detonation. Numbers below holes are in-hole delays(ms). Holes with alpha characters denote groups of the maximum number of holes that fire within 8ms.

All numbers are in milliseconds(ms). Numbers on lines are surface delays(ms) between holes. Holes with alpha characters denote groups of the maximum number of holes that fire within 5ms. Numbers above holes are accumulated times(ms) to detonator.



AIRBLAST MONITORING RESULT

ATTACHMENT 1



vibra-tech engineers incorporated

CONSULTANTS TO THE MINING, QUARRYING, CONSTRUCTION AND EXPLOSIVE USING INDUSTRIES

FIRST & NORTH CHURCH STS. P.O. BOX 577 HAZLETON, PENNSYLVANIA 18201-0577

August 27, 1985

Mr. Don Howell
Peabody Coal Co.
P.O. Box 605
Keyenta, AZ 86033

Dear Mr. Howell:

Attached you will find our report covering the registration and analyses of the air-borne effects transmitted from the primary blast on August 6, 1985 at your Keyenta Mine in Keyenta, Arizona.

The original air concussion record obtained from the blast is attached at the rear. The recording was made on compliance with the OSM Regulation 816.676 (B) (2) (i) governing periodic monitoring of air blasts from blasting.

The air concussion level recorded (107 dB) is well below the OSM Regulation 816.67 (B) (1) (i) of 129 dB linear (6 db system).

If we may be of further assistance in this matter, please advise.

Respectfully submitted,

VIBRA-TECH ENGINEERS, INC.

John Simmanse
Field Representative

Anthony J. Petro, P.E.
President

JS:amc

VIBRA-TECH BLAST AND SEISMOGRAPH ANALYSIS

Company FERROBY CORP CO Address KAYENTA, ARIZONA Operation _____

BLAST DATA

Shot No. 8-27 ^{9" Holes: 21' x 24'} Spacing: 12' x 12' Holes: 27 Total Explosives 49 lbs. 325 lbs.
 Date Aug 6 '85 Depth 26-50 ft. lbs. _____
 Time 1:25 pm Diameter 9" x 12" in. lbs. _____
 No. of holes 138 Stemming 22 ft. lbs. _____
 Exact Blast Loc. J-21, Ramp 4D lbs. _____

SEISMOGRAPH DATA

Exact location of seis RISGILLA YAZZIE RESIDENCE (NE), N.E. OF SHOT
 Seis. No. 2550 Casselle No. 1 Operator J. SIMMONCE Distance from blast 3120 ft.
 Range 100 in/sec. Trigger Level N/A Witness RETE KERRY Meters _____
 Particle Velocity 0.05 ips.
 Air Overpressure 105/6 dbi.
 (ROBBERSLY WIND EFFECTS)

VIBRATION MEASUREMENTS

DO NOT WRITE IN THIS AREA! Maximum vibration _____ %
 Transverse _____ in/sec. of the recommended limit
 Vertical _____ in/sec. of _____ inches/second
 Longitudinal _____ in/sec. of _____ inches/second
 Remarks _____

VIBRATION ANALYSIS BY: _____

* Recorded in J.S. notes as 1:41 pm, and noted in voice record in Page 1.
 Official recorded time, by master watch is 1:25 pm.

BLASTING SCHEDULE NOTICE

ATTACHMENT 2



DATE: November 20, 2009

TO: RANDALL HENDRIX

GARY COURTS

CALVIN TOHANIE

JOHN AUSTIN

GREGG KITCHEN

BARRY GRASS

FROM: JIM SCHLEENVOGT

RE: 2010 ANNUAL BLASTING SCHEDULE NOTICE

Pursuant to 30 CFR 816.64 OSM regulations, please find enclosed for your files, a copy of the 2010 Annual Blasting Schedule Notice to be published in the newspapers in December, 2009. In addition, this blasting schedule notice will be mailed or hand delivered by Walter Begay to the local residents, governmental agency, and public utilities within one-half mile of each mining area.

If requested by a government inspector, please make this notice available. If there is any deviation from or revision to this blasting notice, please contact Kim Pastrick or me immediately.

Js

Enclosures

C: D. Ashike

K. Pastrick

G. Wendt ✓



Peabody Western Coal Company

November 24, 2009

Navajo-Hopi Observer
Attn: Classified Advertising Department
2224 E. Cedar Ave., Suite 2
Flagstaff, AZ 86004

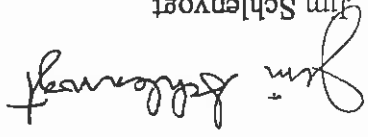
(928) 226-9696, Ext. 2
(928) 226-1115 (fax)

Dear Department Manager:

This request replaces the notice I mailed to your office on November 20, 2009. I request the enclosed public notice titled "2010 Blasting Schedule Notice" be printed on your next publication date in December, 2009, or the closest scheduled publication date, in the classified legal section of your newspaper. If an electronic version of the publication document is required, please email me at the following internet address: jschlenvogt@peabodyenergy.com and I will respond with the electronic version.

Once publication has been completed, please provide an "Affidavit of Publication", verifying publication date and contents, and an invoice to Peabody Western Coal Company, Attn: Mr. Jim Schlenvogt. If you have any questions, feel free to contact me at (928) 677-5089. Thank you for your time and assistance.

Sincerely,


Jim Schlenvogt
Engineering Manager, P.E.

Jgs

Enclosure

C:

- R. Hendrix
- K. Pastick
- G. Wendt
- B. Woodward



Peabody Western Coal Company

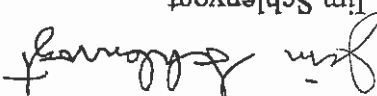
November 24, 2009

The Tutuveni
Attn: Classified Advertising Department
P.O. Box 123, Main St.
Kykotsmovi, AZ 86039
(928) 734-3282
(928) 734-6648 (fax)
Dear Department Manager:

This request replaces the notice I mailed to your office on November 20, 2009. I request the enclosed public notice titled "2010 Blasting Schedule Notice" be printed for your next publication date in December, 2009, or the closest scheduled publication date, in the classified legal section of your newspaper. If an electronic version of the publication document is required, please email me at the following internet address: jschlenvogt@peabodyenergy.com and I will respond with the electronic version.

Once publication has been completed, please provide an "Affidavit of Publication", verifying publication date and contents, and an invoice to Peabody Western Coal Company, Attn: Mr. Jim Schlenvogt. If you have any questions, feel free to contact me at (928) 677-5089. Thank you for your time and assistance.

Sincerely,


Jim Schlenvogt
Engineering Manager, P.E.

Jgs

Enclosure

C: R. Hendrix
K. Pastrick
G. Wendi
B. Woodward



Peabody Western Coal Company

November 24, 2009

Navajo Times
ATTN: Ms. Josephine Carl
Classified Advertising Department
P.O. Box 310
Window Rock, AZ 86515

Dear Ms. Carl:

This request replaces the notice I mailed to your office on November 20, 2009. I request the enclosed public notice titled "2010 Blasting Schedule Notice" be published during your next available publication date in December, 2009, or the closest scheduled publication date, in the classified legal section of your newspaper. If an electronic version of the publication document is required, please email me at the following internet address: jschlenvogt@peabodyenergy.com and I will respond with the electronic version.

Once publication has been completed, please provide an "Affidavit of Publication", verifying publication date and contents, and an invoice to Peabody Western Coal Company Attn: Mr. Jim Schlenvogt. If you have any questions, feel free to contact me at (928) 677-5089. Thank you for your time and assistance.

Sincerely,

Jim Schlenvogt
Engineering Manager, P.E.

Jgs

Enclosure

C: R. Hendrix

K. Pastrick

G. Wendt

B. Woodward

(2010) BLASTING SCHEDULE NOTICE

Peabody Western Coal Company hereby provides notice of its blasting schedule for the Black Mesa Complex located approximately 18 miles southwest of Kayenta, Arizona, address being Post Office Box 650, Kayenta, Arizona 86033 (telephone: 928-677-3201). This notice is provided in accordance with Public Law 95-87.

During the calendar year 2010, blasting of overburden, coal, or parting may occur daily between sunrise and sunset. If, in the opinion of authorized personnel, conditions exist which may jeopardize the public or operator's health, safety, or for emergency blasting actions, then emergency blasting may be accomplished at other times. The operator will document the reason and conditions for the emergency nighttime unscheduled blast.

Access to the blasting area is controlled by physically clearing and removing all unauthorized persons and by the location of appropriate barricades, blockers, flags, and blasting area signs prior to a shot being fired. Before each blast, an audible warning signal of five short signals, an approximate two-minute pause, ten continuous blows from an air horn, and then an approximate one-minute pause prior to the blast will be issued. After each blast an audible all-clear signal of one long continuous blow from an air horn will be issued.

Blasting will primarily occur at six potential mining areas. Each blasting area is contained within T35 and 36N-R18 and 19E of Navajo County, Arizona, and more particularly described below. In addition, blasting may occur to fragment materials during construction or excavation activities at the support facilities described below. Initiation of blasting in sections not covered by this notice will require issuance of a new notice.

PIT AREAS

Blasting can occur on lands generally located approximately three miles southwest of the J-28 Black Mesa Complex Office in portions of Sections 3, 4, 7, 8, 9, 10, 15, 16, 17, 18, 19, 20, 21 and 22, T35N-R19E;

J-19 E

J-19 West

Pit

Blasting can occur on lands generally located approximately three miles south of the J-28 Black Mesa Complex Office in portions of Sections 2, 11, 12, 13, 14, 15, 16, 21, 22, 23, 27, and 28 T35N-R19E;

J-21 Pit

Blasting can occur on lands generally located approximately six miles north of the J-27 Black Mesa Complex Facilities Office in portions of Sections 9, 10, 14, 15, 16, 20, 21, 22, 23, 27, and 28, T36N-R18E. In 2010, the N-6 pit is primarily in reclamation.

N-6 Pit

Blasting can occur on lands generally located approximately nine and one-half miles northwest of the J-28 Black Mesa Complex Office in portions of Sections 28, 29, 32, 33, and 34, T37N-R18E, and Sections 4, 5, and 8, T36N-R18E.

N-9 Pit

Blasting can occur on lands generally located approximately six and one-quarter miles northwest of the J-28 Black Mesa Complex Office in portions of Sections 10, 11, 12, 13, and 14, T36N-R18E. In 2010, the N-11 pit is primarily in reclamation.

N-11 Pit

SUPPORT FACILITIES AREA

Blasting can occur on lands generally located approximately four and one-half miles north/northwest of the U-27 Black Mesa Complex Facilities Office in portions of sections 20, 21, and 28, T36N-R18E.

Blasting can occur on lands generally located approximately within portions of Section 15, T35N-R18E surrounding the U-27 Black Mesa Complex Facilities. Since 2006, these facilities are primarily inactive.

Blasting can occur on lands generally located approximately within portions of sections 20, 29, and 34, T36N-R19E surrounding the U-28 Black Mesa Complex Facilities.

N-6 Scoria

Pit

U-27 Black

Mesa Complex

Facilities

U-28 Black

Mesa Complex

Facilities

Attidavit of Publication

I, Douglas F. Wells, Publisher of the NAVAJO-HOPPI OBSERVER, a newspaper of general circulation published at Flagstaff, Coconino County, Arizona, do solemnly swear that a copy of this notice, as per clipping attached, was published weekly in the regular and entire issue of said paper and not in any supplement thereof, one (1) week, commencing with issue dated December 9th, 2009 and ending with issue dated December 9th, 2009.

Douglas F. Wells, Publisher

[Signature]

Subscribed and sworn to before me this 9th day of December 2009.

Carol J. Delander, Notary Public

My commission expires September 22, 2010

CAROL J. DELANDER
 Notary Public - State of Arizona
 COCONINO COUNTY
 My commission expires Sept. 22, 2010

LEGALS/PUBLIC NOTICES - 2000

2010 BLASTING SCHEDULE NOTICE

Peabody Western Coal Company hereby provides notice of its blasting schedule for the Black Mesa Complex located approximately 18 miles southwest of Kayenta, Arizona, address being Post Office Box 850, Kayenta, Navajo County, Arizona 86033 (Telephone: 928-677-3200). This notice is provided in accordance with Public Law 95-87.

During the calendar year 2010, blasting of overburden, coal, or parting may occur daily between sunrise and sunset. It is the opinion of authorized personnel, conditional order which may constitute the right of issuance a health, safety, or environmental blasting activity, these safety health, safety, or environmental blasting activities, together will document the reason and justification for the emergency blasting activity.

Access to the blasting area is controlled by physical security and fencing all unauthorized persons and by the location of appropriate barriers, blockers, flags, and blasting are signs prior to a shot being fired. Before each blast, an audible warning signal or horn will be sounded to warn persons in the vicinity of the blasting area. An authorized person will be present to observe the blasting operation. Blasting will probably occur on the following dates and times:

Attidavit of Publication

I, Douglas F. Wells, Publisher of the NAVAJO-HOPPI OBSERVER, a newspaper of general circulation published at Flagstaff, Coconino County, Arizona, do solemnly swear that a copy of this notice, as per clipping attached, was published weekly in the regular and entire issue of said newspaper and not in any supplement thereof, one (1) week, commencing with issue dated December 9th, 2009 and ending with issue dated December 9th, 2009.

Douglas F. Wells, Publisher

[Signature]

Subscribed and sworn to before me this 9th day of December 2009.

Carol J. Delander, Notary Public

My commission expires September 22, 2010

CAROL J. DELANDER
 Notary Public - State of Arizona
 COCONINO COUNTY
 My commission expires Sept. 22, 2010

LEGALS/PUBLIC NOTICES - 2000

2010 BLASTING SCHEDULE NOTICE

Peabody Western Coal Company hereby provides notice of its blasting schedule for the Black Mesa Complex located approximately 18 miles southwest of Kayenta, Arizona, address being Post Office Box 850, Kayenta, Navajo County, Arizona 86033 (Telephone: 928-677-3200). This notice is provided in accordance with Public Law 95-87.

During the calendar year 2010, blasting of overburden, coal, or parting may occur daily between sunrise and sunset. It is the opinion of authorized personnel, conditional order which may constitute the right of issuance a health, safety, or environmental blasting activity, these safety health, safety, or environmental blasting activities, together will document the reason and justification for the emergency blasting activity.

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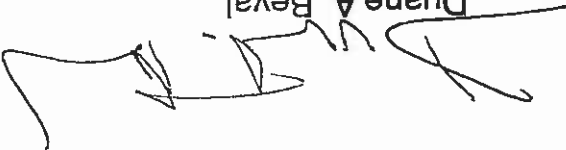
AFFIDAVIT OF PUBLICATION

Invoice# L-7596

I, Duane A. Beyal, Editor of the Navajo Times, a legal newspaper published weekly at Window Rock, Navajo Nation, Arizona, do hereby swear that a legal notice:

2010 Blasting Schedule Notice.
was published in said Navajo Times on the following date(s):

December 3, 2009.
and that said notice is attached to this Affidavit and is a true and exact copy of said notice as published.


Duane A. Beyal
Editor

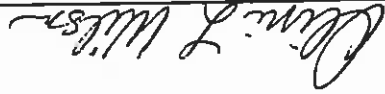
} STATE OF ARIZONA

} COUNTY OF APACHE

SUBSCRIBED AND SWORN TO before me this

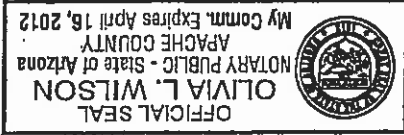
_____ 3rd day of _____ December, 2009.

Notary Public



My Commission Expires:

April 16, 2012



Affidavit of Publication

) State of Arizona,
) ss.
) County of Navajo,

I, **Martina Honie**, being duly sworn, depose and say I am Secretary of **THE HOPI TUTUVENI**, a newspaper of general circulation published at **Kyko'tsmovl**, County of Navajo and State of Arizona that the **2010 Blasting Schedule Notice** attached hereto, was published in said newspaper, **THE HOPI TUTUVENI**, for 1 issue, and said notice was published in the regular and entire issue of every number of the paper during the period of the time of publication and was published in 1 publication of the newspaper proper and not in a supplement, the publications being dated **December 3, 2009**.

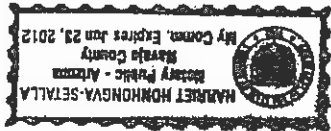
Publication Date: **December 3, 2009**

Martina Honie
Dated Dec. 31, 2009 Signature

SUBSCRIBED AND SWORN TO before me this 31 day of December 2009.

[Signature]
Notary Public

My commission expires 04/23/2012





Date: November 20, 2009

To: Walter Begay, Jr.

From: Jim Schlenvogt

Re: 2010 Blasting Schedule Notice Distribution - Black Mesa & Kayenta Mines

Enclosed is the 2010 Blasting Schedule Notice, which has been mailed to the Navajo Times, Navajo-Hopi Observer, and the Hopi Tuvuveni newspapers. In addition, the Blasting Schedule Notice will be mailed to the government agencies and public utilities. You will need to hand deliver the notices to the list of local residents who do not have post office box addresses.

Please hand deliver the enclosed 2009 Blasting Schedule Notice to the following residents:

- Lilly Crank and family
- Bah Begay and family
- Earl Kescoli and family
- Harrison Crank and family
- Maxine Kescoli and family
- Ned Yazzie and family
- Jacqueline Boyd and family
- Ataid Y. Lake and family
- Kevin Manyules and family
- Mardel Monroe and family

These residents do not receive mail or in the past year their blasting schedule notice mail was returned to PWCC.

Please have each resident sign the "Receipt of Blasting Schedule" form and return the signed form to me for the central files. If the resident refuses to sign or is unable to sign the form, please sign and date the form acknowledging Peabody's contact with the resident and return the information to me as required. Feel free to make additional copies of the "Receipt of Blasting Schedule" form.

Finally, review the attached resident's distribution list to ensure Peabody has notified all local residents, public utilities, and local government officials within one-half mile of the proposed blasting sites. In addition, anyone within one-half mile of the OSM permit boundary is required to be notified in writing of their right to request a preblasting survey of their structures.

If you have any questions or need any assistance, feel free to contact me.

Jgs
Enclosure(s)

C: Randall Hendrix
Kim Pastick
Gary Wendi
Buck Woodward

_____ Peabody's Representative:

_____ Date:

_____ Resident's Signature:

I, _____ have received a 2010 Blasting Schedule for the Black Mesa and Kayenta Mine Complex.

RECEIPT OF BLASTING SCHEDULE

_____ Peabody Western Coal Company





Peabody Western Coal Company

ADDRESSES FOR BLASTING NOTICE:

Bureau of Indian Affairs

Navajo Area Office

P.O. Box 1060

Gallup, NM 87035

Attn.: Regional Manager

Bureau of Indian Affairs

Hopi Agency

P.O. Box 158

Keams Canyon, AZ 86034

Attn.: Regional Manager

The Navajo Tribe

P.O. Box 1910

Window Rock, AZ 86515

Attn.: Minerals Dept.

The Hopi Tribe

P.O. Box 123

Kykotsmovi, AZ 86039

Attn.: Mr. Norman Honie, Jr.

Navajo Tribal Utility Authority

P.O. Box 170

Ft. Defiance, AZ 86504

Navajo Communications Telephone Co.

P.O. Drawer 1600

Window Rock, AZ 86515

Frontier Communication Co.

P.O. Box 6000

Window Rock, AZ 86515

Kayenta School District

P.O. Box 337

Kayenta, AZ 86033

Attn.: Transportation Dept.

Black Mesa Review Board
Attn: Chairman
P.O. Box 1088
Kayenta, AZ 86033

Calvin Etsitty & Family
P.O. Box 505
Kayenta, AZ 86033

Eli Crank & Family
P.O. Box 463
Kayenta, AZ 86033

Lilly Crank & Family
P.O. Box 463
Kayenta, AZ 86033
(Hand Deliver)

Paul & Thelma Johnson & Family
P.O. Box 301
Kayenta, AZ 86033

Pauletta Russell & Family
P.O. Box 301
Kayenta, AZ 86033

Billy & Sally Chief & Family
P.O. Box 1332
Kayenta, AZ 86033

Simon & Irene Crank & Family
P.O. Box 93
Kayenta, AZ 86033

Thomas Crank & Family
P.O. Box 93
Kayenta, AZ 86033

Milton Lake & Family
P.O. Box 1006
Kayenta, AZ 86033

Earl & Ancita Kescoli & Family
P.O. Box 1378
Kayenta, AZ 86033
(Hand Deliver)

Lorraine Vandever
P.O. Box 514
Kayenta, AZ 86033

Ben Jim & Family
P.O. Box 93
Kayenta, AZ 86033

Robert Crank & Family
P.O. Box 93
Kayenta, AZ 86033

Phillip Etsitty & Family
P.O. Box 505
Kayenta, AZ 86033

Ophelia & Leslie Etsitty & Family
P.O. Box 505
Kayenta, AZ 86033

Rose Farley & Family
HCR Box 38-1043
Teec Nos Pos, AZ 86514

Priscilla Yazzie & Family
P.O. Box 1657
Kayenta, AZ 86033
(Deceased May, 2001)

Sadie Kelly & Family
P.O. Box 1657
Kayenta, AZ 86033

Bah Begay & Family
Rough Rock Trading Post
Chimle, AZ 86503
(Hand Deliver)

Mabel Thomas & Family
P.O. Box 1456
Winslow, AZ 86047

Elsie Vandever & Family
P.O. Box 1428
Kayenta, AZ 86033

Lillie Johnson & Family
P.O. Box 1135
Kayenta, AZ 86033

Harrison Crank & Family
P.O. Box 1942
Kayenta, AZ 86033
(Hand Deliver)

Annie Herrera & Family
P.O. Box 977
Kayenta, AZ 86033

Clarence Lake & Family
P.O. Box 1999
Kayenta, AZ 86033

Daniel Benally & Family
P.O. Box 433
Kayenta, AZ 86033

Ated Lake & Family
P.O. Box 1412
Kayenta, AZ 86033

Maxine Kescoli & Family
P.O. Box 1165
Pinon, AZ 86510
(Hand Deliver)

James & Inez Cody & Family
P.O. Box 1745
Kayenta, AZ 86033

Leonard Honnie, Jr. & Family
P.O. Box 2305
Kayenta, AZ 86033

Mr. & Mrs. Ron Lane & Family
P.O. Box 335
Kayenta, AZ 86033

Mr. & Mrs. Charles Kee & Family
P.O. Box 1657
Kayenta, AZ 86033

H. Blackrock & Family
P.O. Box 461
Tuba City, AZ 86045

John Babe & Family
P.O. Box 1211
Kayenta, AZ 86033

Betty Crank & Family
P.O. Box 2123
Kayenta, AZ 86033

Irene Becenti & Family
P.O. Box 1506
Kayenta, AZ 86033

Fenae Tallman & Family
P.O. Box 2566
Shonto, AZ 86054

Albert Crank & Family
P.O. Box 3124
Kayenta, AZ 86033

Bessie Luna & Family
P.O. Box 1763
Kayenta, AZ 86033

Alta Rose Albert & Family
P.O. Box 755
Kayenta, AZ 86033

Kornelia & Carol Tallman & Family
P.O. Box 481
Kayenta, AZ 86033

Aurita Lake Yazzie & Family
P.O. Box 846
Kayenta, AZ 86033

Joe Lake & Family
P.O. Box 839
Kayenta, AZ 86033

Joanne Cody & Family
P.O. Box 451
Kayenta, AZ 86033

Martha Chee & Family P.O. Box 1361 Pinon, AZ 86510	Lake Family P.O. Box 644 Kayenta, AZ 86033
Susie Yazzie & Family P.O. Box 3147 Kayenta, AZ 86033	Eugene Leonard & Family P.O. Box 1312 Kayenta, AZ 86033
George & Mae Pulinos & Family P.O. Box 1907 Kayenta, AZ 86033	Rose Yazzie & Family P.O. Box 1275 Kayenta, AZ 86033
Ruby Ralph & Family P.O. Box 2272 Kayenta, AZ 86033	Johnson Crank & Family P.O. Box 141 Kayenta, AZ 86033
John Billy Tsosie & Family P.O. Box 805 Kayenta, AZ 86033	Ned Yazzie & Family P.O. Box 211 Kayenta, AZ 86033
Alice Yazzie & Family P.O. Box 183 Kayenta, AZ 86033	Mrs. Walter Begay, Sr. & Family P.O. Box 246 Kayenta, AZ 86033
Billy Austin & Family P.O. Box 1126 Kayenta, AZ 86033	Woodie Anderson/Victoria L. Tso & Family P.O. Box 102 Kayenta, AZ 86033
Julia Jane Russell & Family P.O. Box 1583 Kayenta, AZ 86033	Alice Tso & Family P.O. Box 1407 Kayenta, AZ 86033
Edward Begay Sr. & Family P.O. Box 1017 Winslow, AZ 86047	Benny Etsitty & Family P.O. Box 133 Pinon, AZ 86510
Jacqueline Boyd & Family General Delivery Kayenta, AZ 86033	Ned K. Benally & Family P.O. Box 129 Pinon, AZ 86510
Hand Delivery	Hand Delivery

Lucille Benally & Family
Black Mesa S.C.
Tonalea, AZ 86044

Kee Crank & Family
359 N. 3rd W.
Rigby, Idaho 83442

Kevin Manyules & Family
3240 W. Brenda Loop
Flagstaff, AZ 86004
(Hand Delivery)

Sarah Kee & Family
144 Granada Dr.
Mtn. View, CA 94043

Laurinda Lake & Family
P.O. Box 1102
Flagstaff, AZ 86002

Francis Lake & Family
P.O. Box 2066
Kayenta, AZ 86033

Lavonne Segay & Family
P.O. Box 1998
Kayenta, AZ 86033

Jacqueline Piper & Family
155 Beech
Gardner, KS 66030

Leta Tsosie Williams & Family
P.O. Box 1247
Kayenta, AZ 86033

Mary Begay Gilmore & Family
P.O. Box 1531
Kayenta, AZ 86033

Nancy M. Yazzie & Family
9600 E. Jesse Dr.
Flagstaff, AZ 86004

Victoria Lynn Tso & Family
P.O. Box 102
Kayenta, AZ 86033

Ataid Y. Lake & Family
P.O. Box 1142
Kayenta, AZ 86033
Hand Delivery

Lena Lake & Family
P.O. Box 1243
Kayenta, AZ 86033

Sam Lake & Family
P.O. Box 1412
Kayenta, AZ 86033

Esther Lake & Family
P.O. Box 2026
Kayenta, AZ 86033

Marie Lake & Family
4575 West 1215 South
Cedar City, UT 84720

Molita Lake & Family
P.O. Box 1693
Kayenta, AZ 86033

Darren Bizardi & Family
2054 Juneau St.
San Leandro, CA 94577

Lena Sansosie & Family
P.O. Box 2572
Kayenta, AZ 86033

Perry & Corraine Roan & Family
P.O. Box 1353
Pinon, AZ 86510

Kee John Kescoli & Family
P.O. Box 1941
Kayenta, AZ 86033

Alice J. Begay & Family
P.O. Box 1362
Kayenta, AZ 86033

Mardel Monroe & Family
P.O. Box 1077
Kayenta, AZ 86033

Willis K. Begay & Family
P.O. Box 927
Pinon, AZ 86510

Mary Ann Sherlock & Family
P.O. Box 2144
Kayenta, AZ 86033

Hand Delivery

PREBLAST SURVEY NOTICE

ATTACHMENT 3

PEABODY COAL COMPANY

ARIZONA DIVISION

1300 SOUTH YALE

FLAGSTAFF, ARIZONA 86001

TELEPHONE 16021 774-5253

January 11, 1985

Mr. Roy Tso

P.O. Box 1407

Kayenta, AZ 86033

RE: INSTRUCTIONS FOR REQUESTING A PRE-BLAST SURVEY
(IN ACCORDANCE WITH 30 CFR 816.62)

Dear Mr. Tso:

Peabody Coal Company plans to initiate blasting in the J-21 mining area, located approximately two miles southeast of the new Kayenta Mine office, on February 13, 1985. A resident or owner of a dwelling or structure within one-half mile of any part of permit area AZ-0002A may request a pre-blast survey. This request shall be made, in writing, directly to Peabody Coal Company, Post Office Box 605, Kayenta, Arizona 86033, or to the Office of Surface Mining, Administrator, Western Technical Center, Brooks Towers, 1020 Fifteenth Street, Denver, Colorado 80202. Additional clarifications can be obtained by telephoning Fred Fess at 774-5253, Sam Shifflett or S11 Peria at 677-3201.

The request must state the name and mailing address of the resident(s) or owner(s), specific identification and location of the dwelling(s) and/or structure(s) to be surveyed and shall be signed by the requestor.

Peabody shall determine the condition of the interior and exterior of the dwelling or structure and will provide a written report signed by the person who conducted the survey. If the person requesting the survey disagrees with the contents and/or recommendations contained in the report, a detailed description of the specific areas of disagreement may be submitted to both Peabody Coal Company and the Office of Surface Mining.

Any surveys requested more than 10 days before planned initiation of blasting shall be completed by Peabody Coal Company before the initiation of blasting.

A blasting schedule is attached for your information.

Sincerely,

Fred W. Fess, III

Manager

Compliance Engineering

dd

Attachment

BLASTING SCHEDULE NOTICE

Peabody Coal Company hereby provides notice of its blasting schedule for the Black Mesa and Kayenta Mines located approximately 18 miles southwest of Kayenta, address being Post Office Box 605, Kayenta, Navajo County, Arizona 86033 (telephone 602-677-3201). This notice is provided in accordance with Public Law 95-87.

During the period January 1, 1985, through January 1, 1986, blasting of overburden will occur between sunrise and sunset, Mondays through Saturdays. If, in the opinion of authorized personnel, conditions exist which may constitute a safety hazard, then blasting of overburden may be accomplished at other times. Blasting of coal and parting materials may occur at any time.

Access to the blasting area is controlled by physically clearing and removing all unauthorized persons and by the location of appropriate barricades, blockers, flags and blasting area signs prior to a shot being fired. Before each blast, an audible warning of ten continuous blows from an air horn will be issued. After each blast, an audible all-clear signal of one long continuous blow from an air horn will be issued.

Blasting will primarily occur at six active mining areas. Each blasting area is contained within T35 and 36N-R18 and 19E of Navajo County, Arizona, more particularly described below. Initiation of blasting in mining areas not covered by this notice will require issuance of a new notice.

N-7 and N-8 Pts --

Blasting can occur on lands generally located ten and one-quarter miles northwest of the new Kayenta Mine office in Sections 6 and 7, T36N-R18E;

N-14 Pts --

Blasting can occur on lands generally located three miles northwest of the new Kayenta Mine office in Sections 16, 17, 18, 19, 20 and 21, T36N-R19E;

J-16 Pts --

Blasting can occur on lands generally located one and one-half miles west of the new Kayenta Mine office in Sections 27, 28, 29, 32, 33 and 34, T36N-R19E;

J-21 Pts --

Blasting can occur on lands generally located two miles southeast of the new Kayenta Mine office in Sections 1, 2, 3, 10, 11 and 12, T35N-R19E;

J-7 Pts --

Blasting can occur on lands generally located two and one-quarter miles south of the Black Mesa Mine office in Sections 26, 27 and 28, T35N-R18E;

J-1/N-6 Pts --

Blasting can occur on lands generally located six and one-half miles northwest of the new Kayenta Mine office in Sections 15, 16, 21, 22, 23, 26, 27 and 28, T36N-R18E.

P 489 843 946

RECEIPT FOR CERTIFIED MAIL

NO INSURANCE COVERAGE PROVIDED - NOT FOR INTERNATIONAL MAIL

(See Reverse)

Sent to *Mr Roy Tol*

Street and No *PO Box 1407*

P State and ZIP Code *Rayenta AZ 86033*

Postage \$ *5*

Certified Fee

Special Delivery Fee

Restricted Delivery Fee

Restricted Delivery Fee

Return Receipt Showing

to whom and Date Delivered

Return Receipt Showing to whom, Date, and Address of Delivery

TOTAL Postage and Fees \$ *5*

Postmark of Date *1-11-85*

PS Form 3800, Feb. 1982

preblast survey

DOMESTIC RETURN RECEIPT

PS Form 3011, July 1983

SENDER: Complete items 1, 2, 3 and 4.

Put your address in the "RETURN TO" space on the reverse side. Failure to do this will prevent this card from being returned to you. The return receipt fee will be provided to you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check boxes (for services) requested.

1. Show to whom, date and address of delivery.

2. Restricted Delivery.

3. Article Addressed to:

*Mr. Roy Tol
PO Box 1407
Rayenta AZ 86033*

4. Type of Service:

Registered Insured COD Express Mail

Always obtain signature of addressee or agent and DATE DELIVERED.

5. Signature - Addressee

6. Signature of Agent

7. Date of Delivery *1-16-85*

8. Addressee's Address (ONLY if requested and fee paid)

BLASTING SURVEYS

ATTACHMENT 4

PEABODY
NOTICE OF MINING

TO: Priscella Yazzie
P.O. Box 1657
KAYENTA, AZ. 86033

You are hereby given notice that Peabody intends to begin mining in the area indicated on the attached map on the following date:

Have already begun mining.

If you own property or improvements within or half a mile of this area, your property or improvements will be affected by the mining operation and you have the right to request for a pre-blasting inspection of your property or improvements before mining begins, and if any of these properties or improvements are in the way of the mining, it must be moved and relocated out to any area not affected by mining.

I, Priscella Yazzie, received and understand fully the content of the above notice, and I hereby give my consent; will not consent to have a pre-blasting inspection done on my property or improvements.

Priscella Yazzie
Signature

8-1-85
Date

WITNESS:

Charles A. King
Sarah M. King
Mae B. King

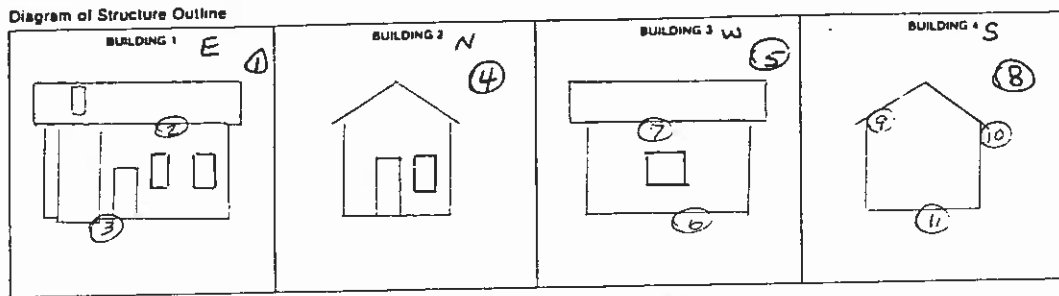
PEABODY COAL COMPANY

301 NORTH MEMORIAL DRIVE - P.O. BOX 235 - ST. LOUIS, MISSOURI 63168

CONDITION REPORT

Location: NW 1/4, NE 1/4, SEC 2, T35N, R19E Date: 9-4-85
 File Number: 152-86567-155-E Time: 10:30 Am
 Property Address: P.O. Box 1657 KAYENTA, AZ 86033
Number Street City County State

Occupant(s): _____
 Owner: PRICELLA YAZZIE Mailing Address: Same
 Residential Mercantile Farm Other



CONDITION AND DEFECTS Section II

Building No. 1 Frame Brick Brick Veneer Stucco
Metal Other (DESCRIBE) _____
 Type: Dwelling Garage Shed Other (DESCRIBE) _____
 Number Stories 1 Overall Condition: Good Average Poor

EXTERIOR	(Material)	(Condition)
Roof	<u>CEDAR SHAKE</u>	<u>GOOD (NEW HOUSE)</u>
Siding	<u>COMP. PANEL</u>	<u>GOOD</u>
Door/Windows	<u>ALUMINUM FRAME</u>	<u>GOOD</u>
Chimneys	<u>STEEL PIPE</u>	<u>GOOD</u>
Floors	<u>CONCRETE SLAB</u>	<u>GOOD</u>
Porch (es)	<u>CONCRETE</u>	<u>GOOD</u>

Roof Drainage Adequate Yes No Porch(es) Yes No
 Condition Downspout - Leaking Yes No None
 Condition Drain Tile - Leaking Yes No None
 Downspouts Drain To: Earth Sewers Catch Basin Splash
 How Far Drainage Carried From Foundation 2 Feet
 Location Downspouts NIA
 Natural Lot Drainage Flows N S W E
 Is Erosion Visible Within Two Feet of Foundation? Yes No
 Is Settlement Visible Around Foundation? Yes No
 Has Drainage Contributed to ongoing Settlement? Yes No

What Area of Building? _____
 Water Supply Type _____ Condition _____
 COMMENTS HOUSE OCCUPIED IN MAY 1985. HOUSE IS ONLY 3 MONTHS OLD. ASIDE FROM SOME DAMAGE TO VENEER DURING INSTALLATION, WE FOUND NO CRACKING OR OTHER DAMAGE TO EXTERIOR. WE FOUND SOME SEPARATION IN EYE JOINTS WOOD STRUCTURE WITH SOME SPLIT EYE HEADERS AND RAFTERS

INTERIOR CONDITION
Section IV

	N	E	S	W			
Room	LIVING ROOM				Material	SHEET ROCK	Ceiling
	<ul style="list-style-type: none"> Rectangles indicate Windows and Doors Wavy Lines indicate Cracking of Wall Covering Material 						
Room	BED ROOM				Material	SHEET ROCK	
Room	BATHROOM				Material	SHEET ROCK	
Room	BED ROOM				Material	SHEET ROCK	
Room	BED ROOM				Material	SHEET ROCK	FLOOR
						(15) 7	
Room	KITCHEN				Material	SHEET ROCK	
Room	LAUNDRY				Material	SHEET ROCK	
Room					Material		
Room					Material		

NOTE: Repeat Sections II, III, and IV for Each Additional Building at This Location.

COMMENTS: INTERIOR OF HOUSE BASICALLY NOT OCCUPIED YET.
 OCCUPANT MOVING IN.
 CABINETS IN KITCHEN HAVE LARGE SEPARATION AT N/E CORNER.
 UTILITY/WATER AND SEPTIC NOT ATTACHED TO HOME.
 NO WATER TANK. WATER HEATED AND NO SEWER.
 MORTAR IS MISSING OR LIGHT IN SOME SPOTS BEHIND
 THE WOOD STOVE IN BRICK WORK.

Inspector B. D. King Copy given to Owner Yes No
 COMPANY WILL SEND

WATER WELL SURVEY

NAME: PRISCILLA GAZZIE ADDRESS: P.O. BOX 1657, KAMENTA AZ.Water Supply- PEABODY 860?
Well () Cistern () Pond () Other (HAULED)

Age () Drilled () Dug () Augered ()

Total depth () ft // Depth to water (static level) () ft

Casing (size and type) N/AGravel pack () Thickness and composition N/ADriller N/A Date drilled _____

Capacity test made () // When: _____

Done by: _____

Results: _____

Pump/Plumbing

Pump type () Pump depth () ft

Replacement or service: _____

Brief description of water system (pipe material, tanks, etc) _____

USING BARRELS AND GETTING WATER AS NEEDED

Quantity-

Capacity (if known): _____ Approximate discharge: _____ gpm

Ever haul water or lose supply: USING BARRELSSeasonal fluctuations: N/AConsumption: Persons (7) Flush toilet (/) Shower/bathtub (/)Automatic washer () Dishwasher () Livestock (CATTLE/SHEEP)

Garden/lawn watering () Other uses (_____)

Recent changes in use () Date (_____) Increase/Decrease

Details: _____

Water Quality-

Taste/Odor (—) Sand (—) Color (—)

Other (_____)

Factors affecting quality: _____

Water sample yes () no ()

Historical Data and Previous Performance (give details):-

NO SEPTIC OR RUNNING WATER - WATER IS HAULED AS NEEDED. THE OCCUPANT IS NOT USING PLUMBING AS NONE IS HOOKED UP. THERE IS NO SEPTIC TANK, OR FRESH WATER HOLDING TANK, AS YET.

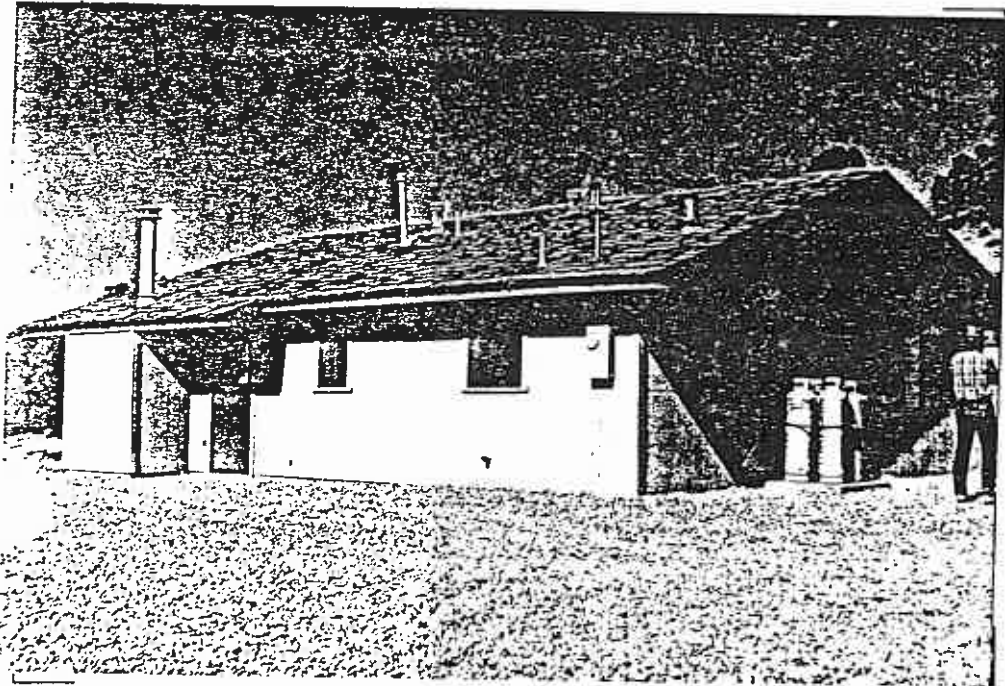
PHOTO MOUNTING SHEET

Insured/Owner PRISCILLA YAZZIE

Company Claim No. — Policy No. —

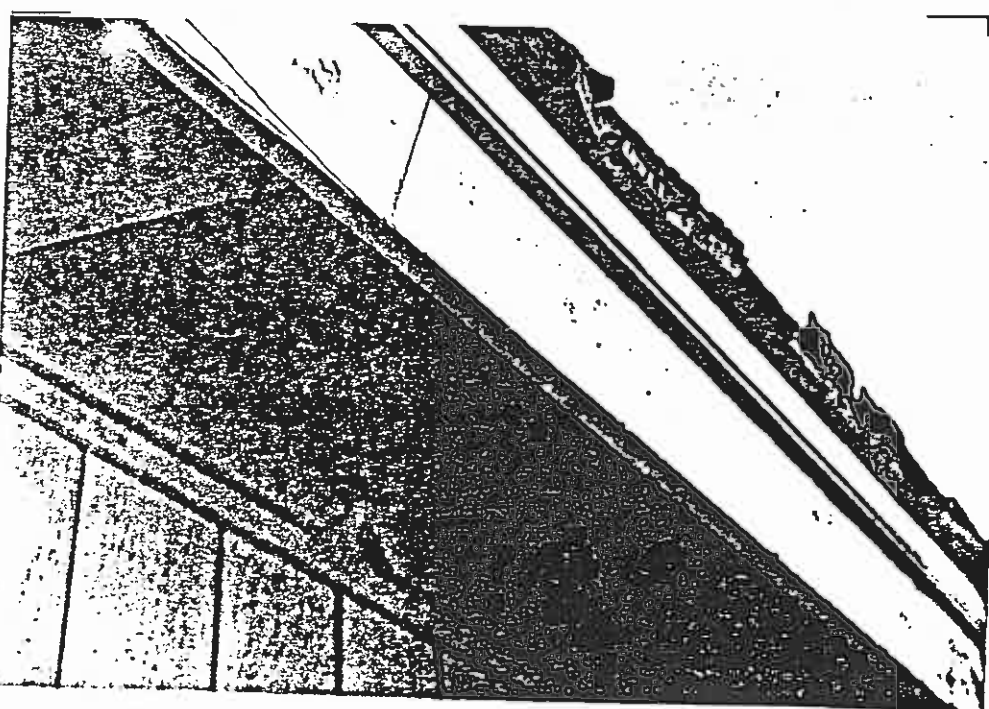
Our File No. 152-86567-BSF Date Taken 9-4-85

Film — Polaroid Negative Adjuster BSF



PICTURE NUMBER 1

DESCRIPTION N.E. CORNER



PICTURE NUMBER 2

DESCRIPTION EVE SPLIT

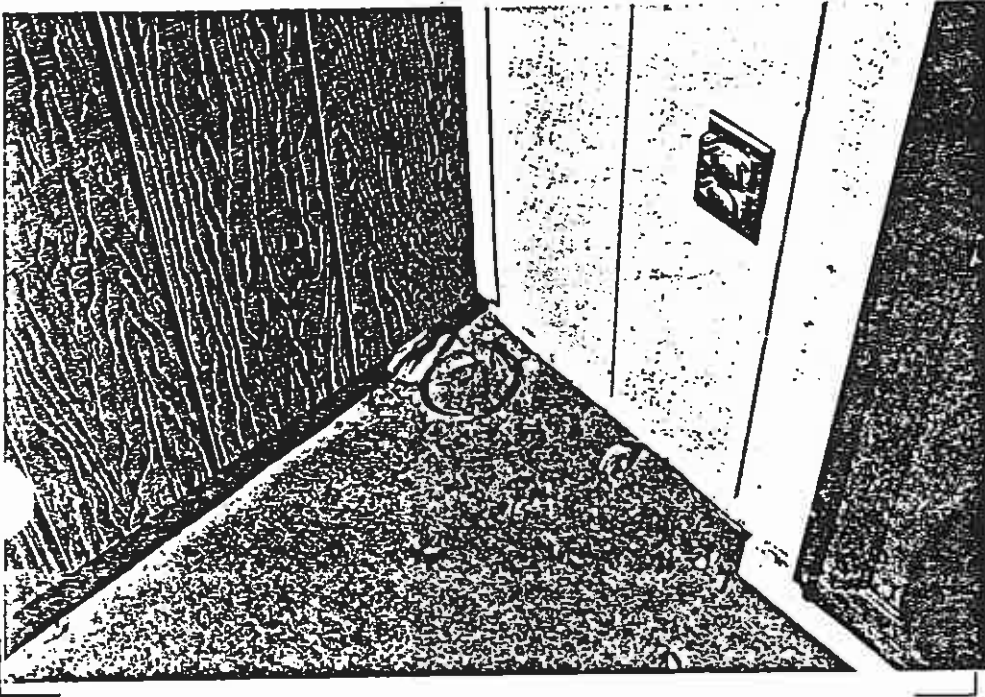
PHOTO MOUNTING SHEET

sured/Owner _____

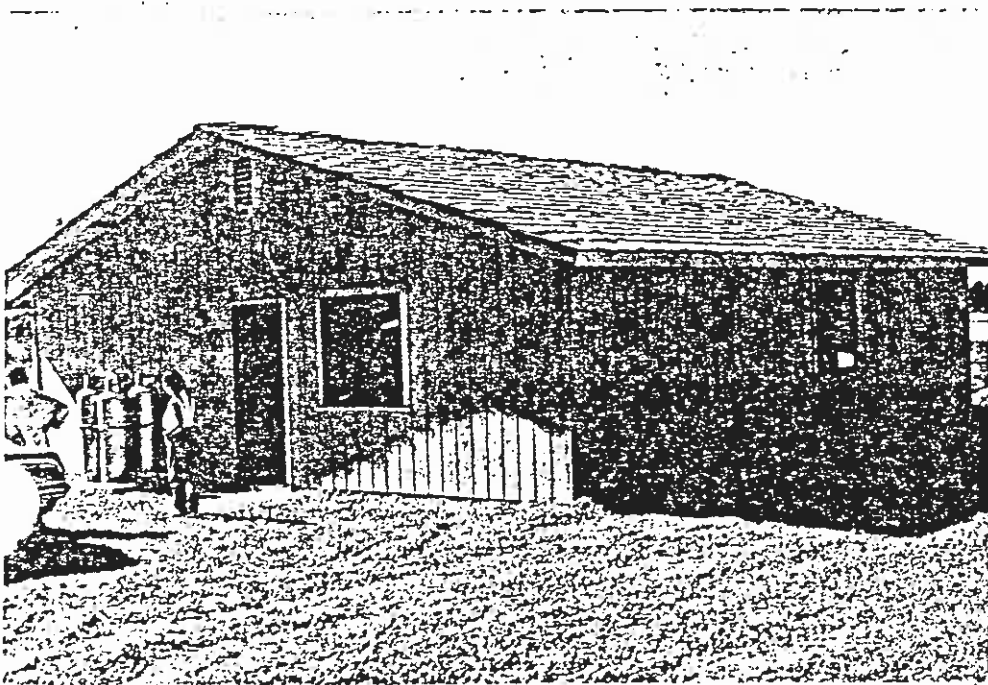
Company Claim No. _____ Policy No. _____

Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 3
DESCRIPTION FOUNDATION
CRACK AT FLOOR



PICTURE NUMBER 4
DESCRIPTION N.W. CORNER

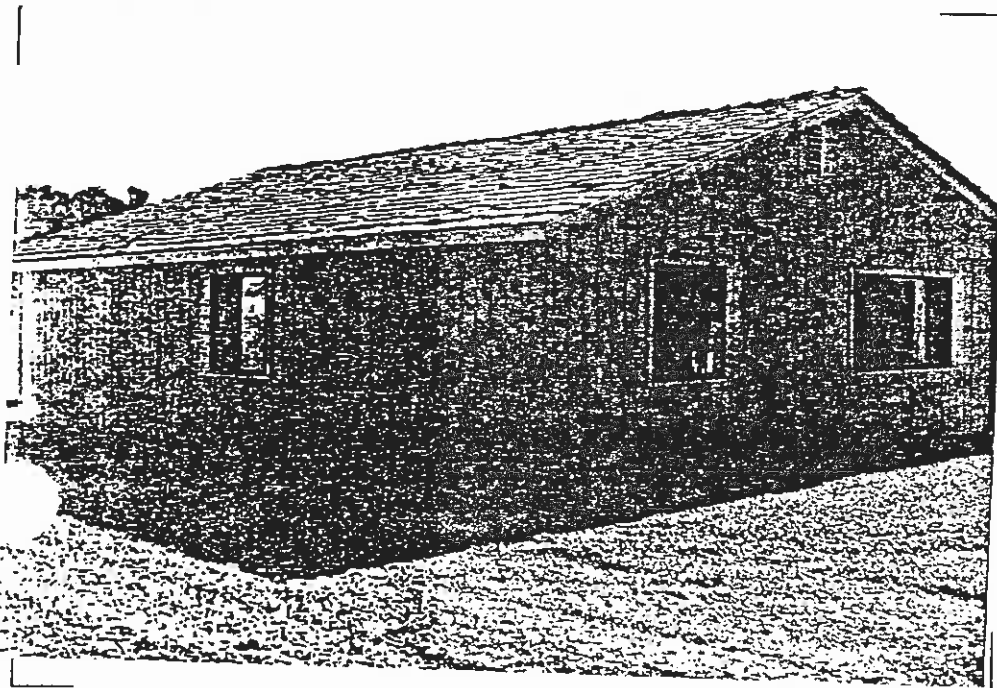
PHOTO MOUNTING SHEET

sured/Owner _____

Company Claim No. _____ Policy No. _____

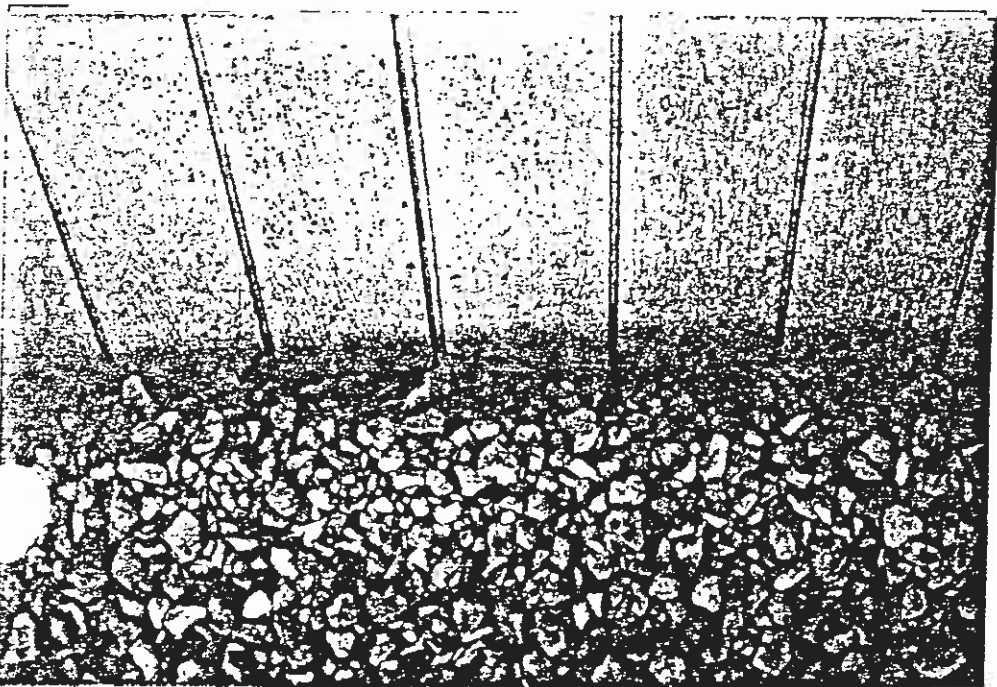
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 5

DESCRIPTION S.W. CORNER



PICTURE NUMBER 6

DESCRIPTION BROKEN

PANELING - W-SIDE

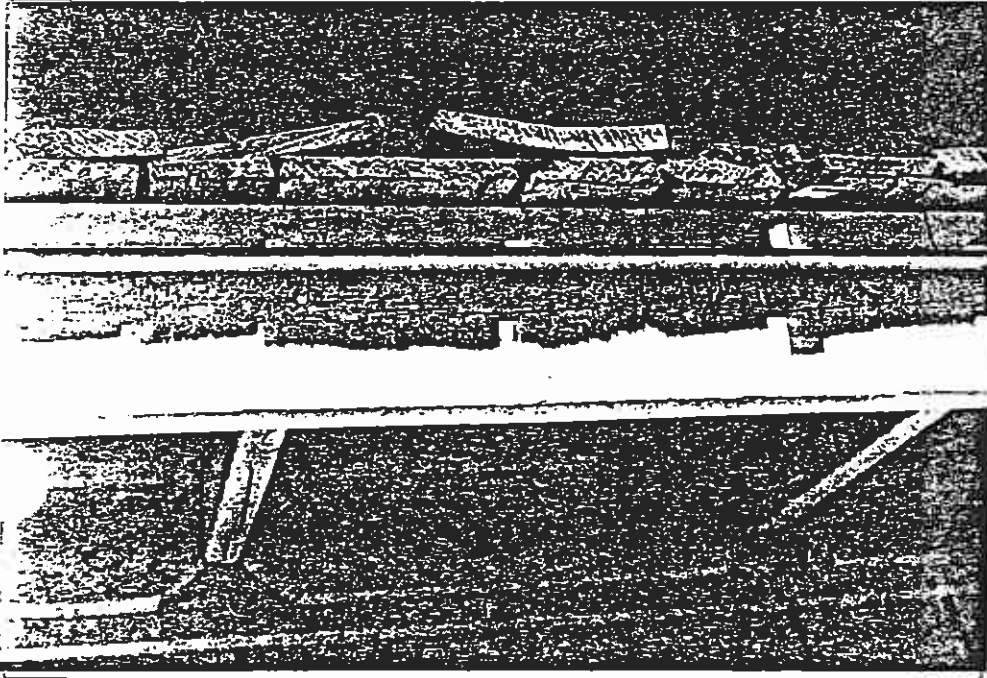
PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____ Policy No. _____

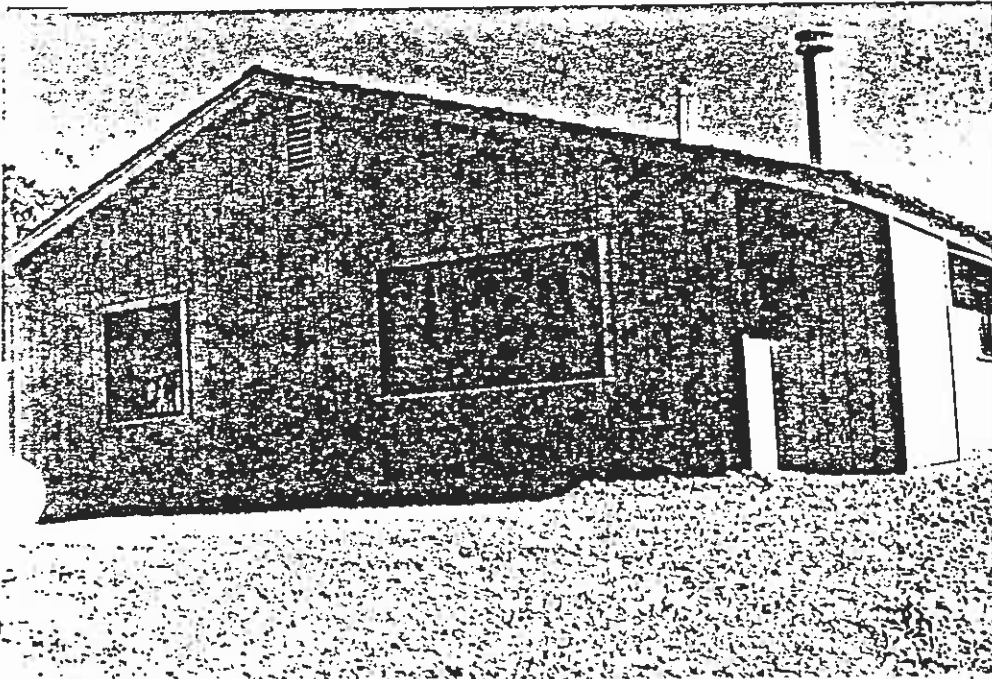
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 7

DESCRIPTION SPLIT
FACIA - W/SIDE



PICTURE NUMBER 8

DESCRIPTION S.E. CORNER

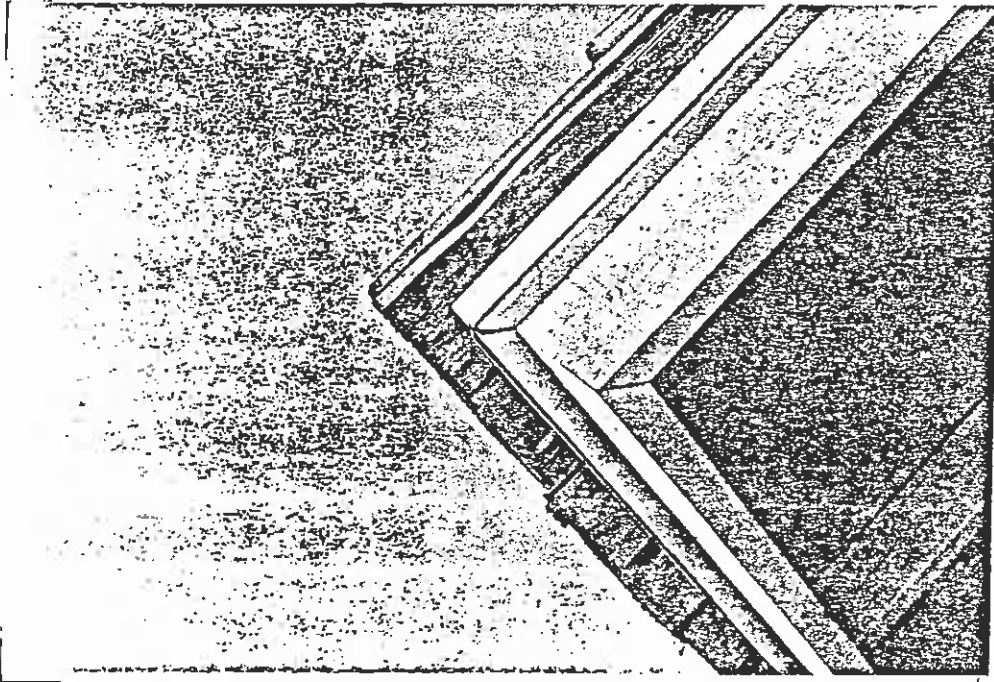
PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____ Policy No. _____

Our File No. _____ Date Taken _____

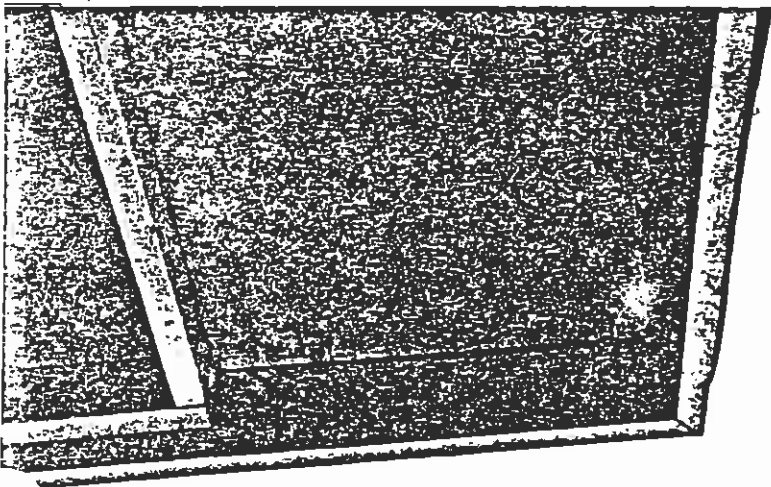
Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 9

DESCRIPTION S.W. EYE

SEPARATION



PICTURE NUMBER 10

DESCRIPTION S.E. EYE

TO ROOF (SUB ROOF)

SEPARATION

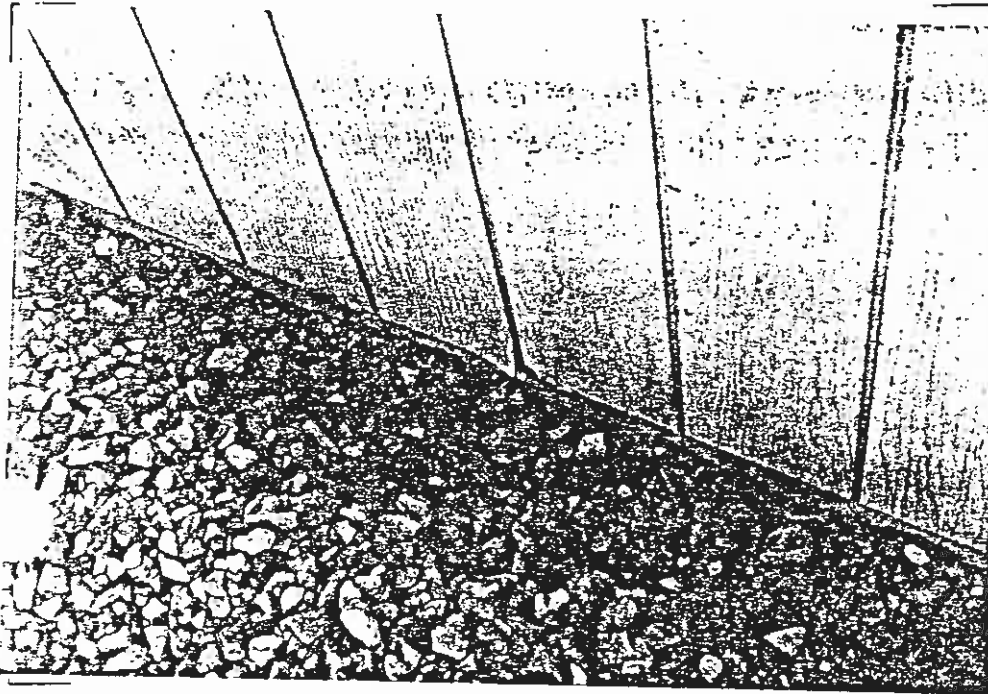
PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____ Policy No. _____

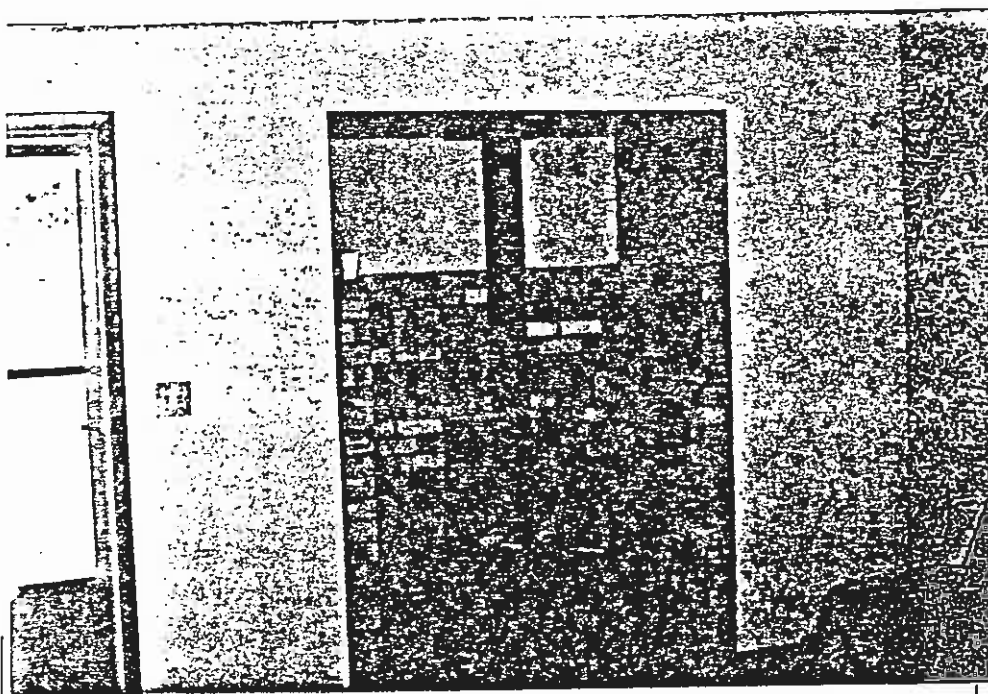
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 11

DESCRIPTION SOUTH SIDE
BROKEN PANELING



PICTURE NUMBER 12

DESCRIPTION LIVING
AREA - SECTION
WOOD STOVE

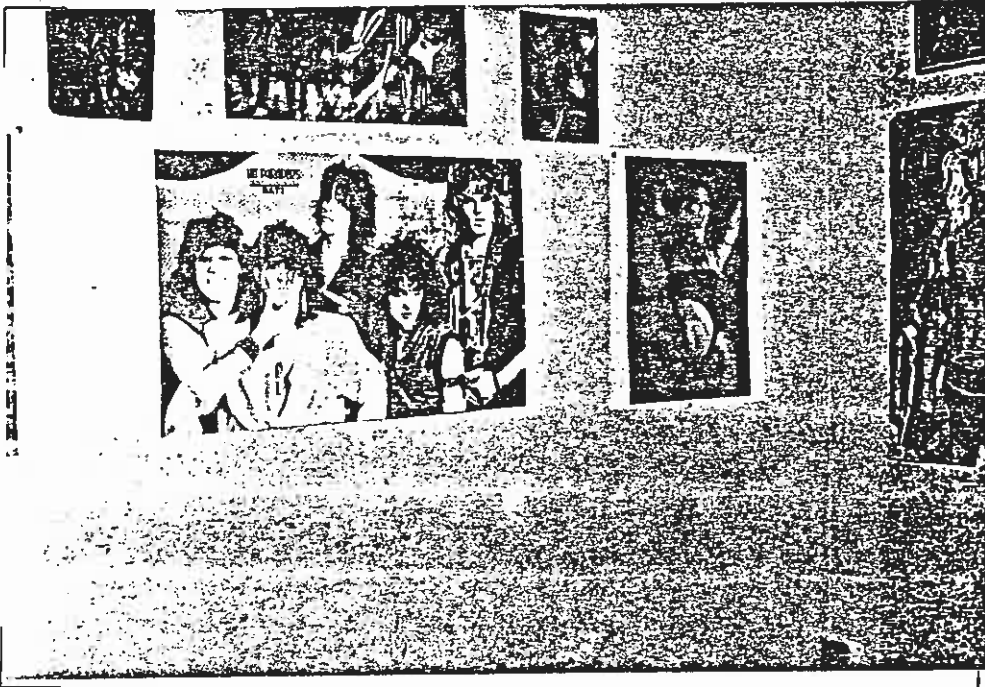
PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____ Policy No. _____

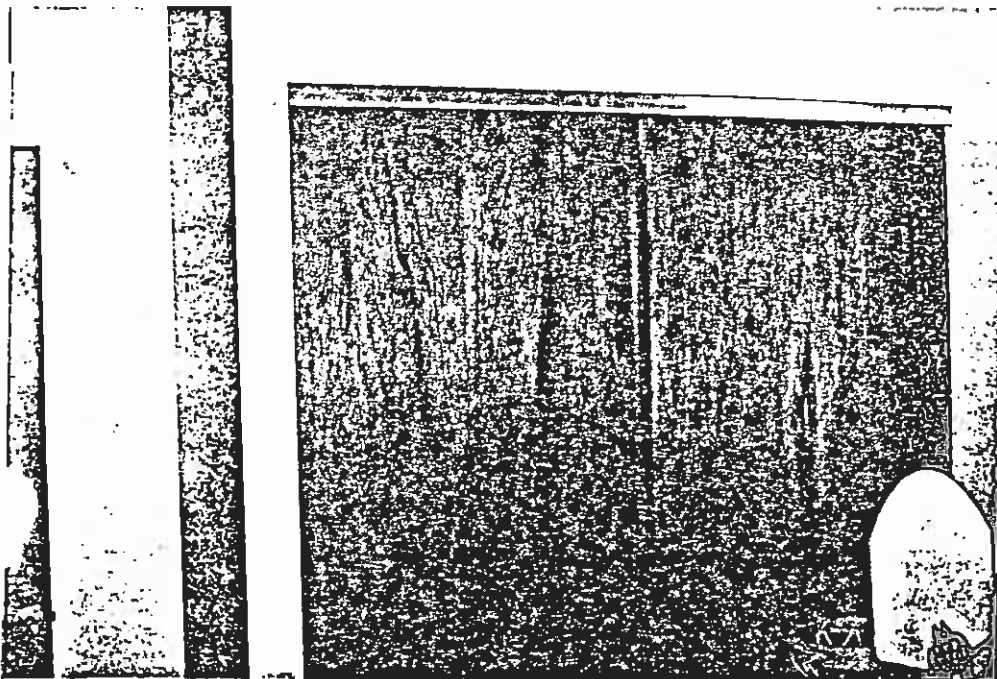
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 13

DESCRIPTION Bedroom -



PICTURE NUMBER 14

DESCRIPTION Bedroom - 2

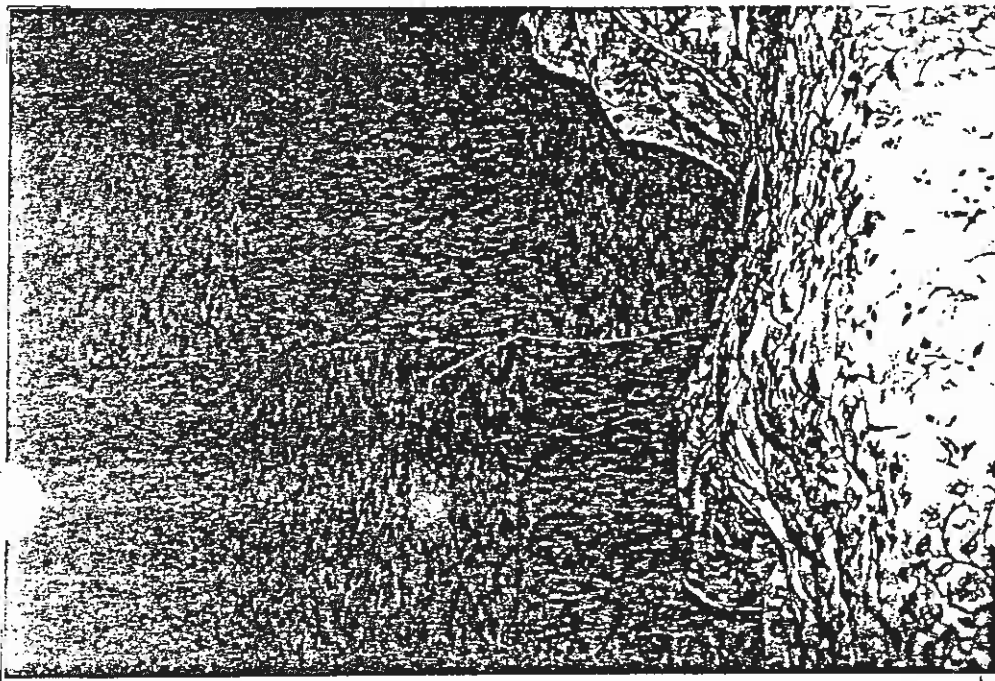
PHOTO MOUNTING SHEET

sured/Owner _____

Company Claim No. _____ Policy No. _____

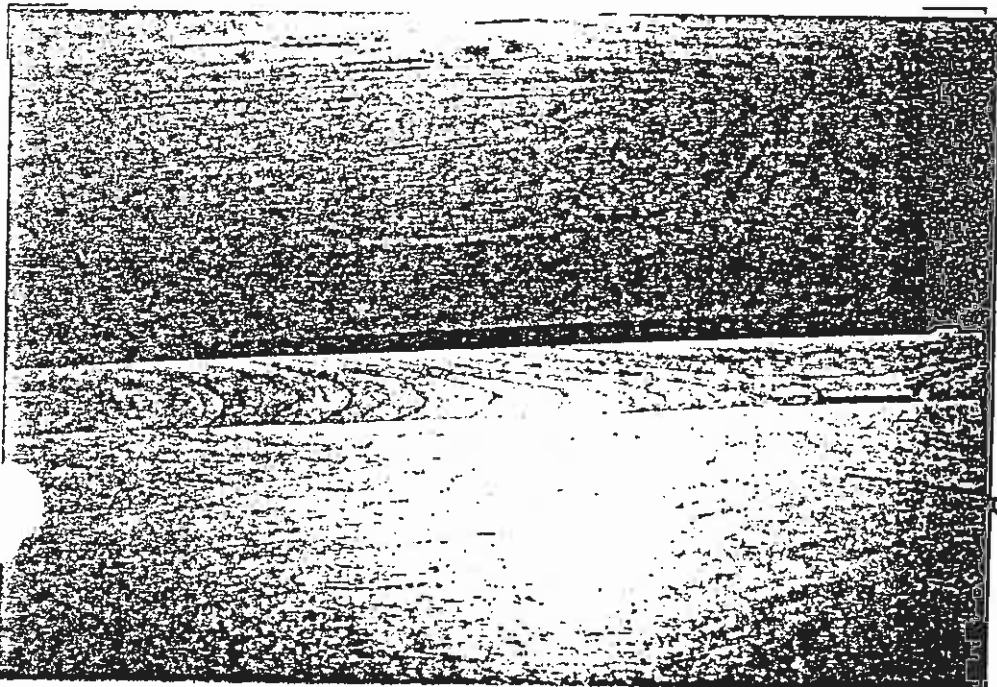
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 15

DESCRIPTION BED ROOM - 3



PICTURE NUMBER 16

DESCRIPTION KITCHEN

CAB. NETS SEPARATE

AT BASE.

PEABODY
NOTICE OF MINING

TO: SADIE AND Preston Kelly
P.O. Box 1657
KAYENTA, AZ. 86033

You are hereby given notice that Peabody intends to begin mining in the area indicated on the attached map on the following date:

Have already begun mining

If you own property or improvements within or half a mile of this area, your property or improvements will be affected by the mining operation and you have the right to request for a pre-blasting inspection of your property or improvements before mining begins, and if any of these properties or improvements are in the way of the mining, it must be moved and relocated out to any area not affected by mining.

I, Sadie Y. Kelly, received and understand fully the content of the above notice, and I hereby give my consent; will not consent to have a pre-blasting inspection done on my property or improvements.

Sadie Y. Kelly
Signature

Aug. 23. 1985
Date

WITNESS:

PEABODY COAL COMPANY

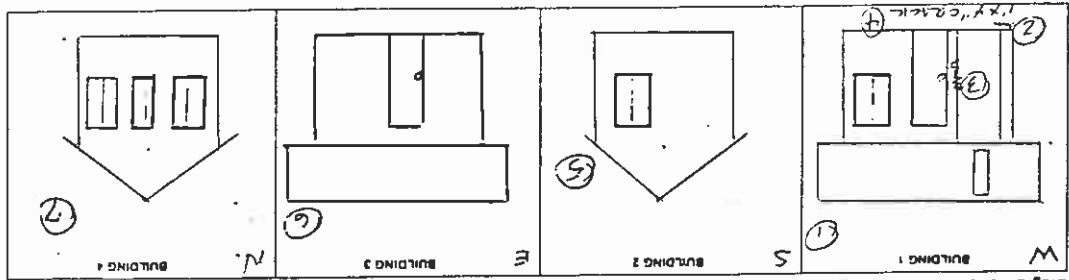
301 NORTH MEMORIAL DRIVE - P.O. BOX 235 - ST. LOUIS, MISSOURI 63166

CONDITION REPORT

Location: NW 1/4, NW 1/4, SEC 2, T35N, R17E File Number: 152-86564-135E
 Date: 9-4-85 Time: 11:15 Am

Property Address: 86046 Occupant(s): SADIE KELLY
 Owner: SAME Mailing Address: P.O. BOX 1657, KANSAS CITY, MO 64103

Diagram of Structure Outline: Residential Mercantile Farm Other
 Building No.: Frame Brick Brick Veneer Stucco Metal Other



CONDITION AND DEFECTS

Building No. _____ Type: Dwelling Garage Shed Other
 Overall Condition: Good Average Poor (DESCRIBE) _____
 Number Stories: _____

EXTERIOR	Roof	Siding	Door/Windows	Chimneys	Floors	Porch (es)
CEMENT SURFACE	COMP. PAVEMENT	ALUMINUM FRAMES	STEEL P.I.R.	CONCRETE SLABS	CONCRETE	
Good	Good	Good	Good	Good	Good	Good
(Material)	(Material)	(Material)	(Material)	(Material)	(Material)	(Material)

Roof Drainage Adequate: Yes No Porches: Yes No
 Condition Downspout - Leaking: Yes No None
 Condition Drain Tile - Leaking: Yes No None
 Downspouts Drain To: Earth Sewers Catch Basin Splash
 How Far Drainage Carried From Foundation: _____ Feet _____
 Location Downspouts: N/A

Natural Lot Drainage Flows: N S W E
 Is Erosion Visible Within Two Feet of Foundation? Yes No
 Is Settlement Visible Around Foundation? Yes No
 Has Drainage Contributed to Building Settlement? Yes No

What Area of Building? _____
 Water Supply: Type _____ Condition _____
 COMMENTS: HAULED AS USED
CLACK IN FOUNDATION AT N/E CORNER, HOME
IS NOT OCCUPIED AS YET. THERE IS NO ELECT. POWER
YET. WATER IS NOT CONNECTED TO TANK. NO EXTERIOR
SEWER OR SEPTIC TANK. BATHROOM AND KITCHEN
FIXTURES NOT DRAINED TO OUTSIDE RECEPTOR.
LAND SEPARATION ON FIRE BREAK - R-5.08 NEXT TO E-DOOR, BROKEN
PANEL UNDER E-WINDOW

INTERIOR CONDITION
Section IV

N E S W

Room	Material	Material	Material	Material
Room Living Room	SHEETROCK			
Room KITCHEN	SHEETROCK			
Room LAUNDRY	SHEETROCK			
Room BEDROOM	SHEETROCK			
Room BEDROOM	SHEETROCK			
Room BEDROOM	SHEETROCK			
Room BATH ROOM	SHEETROCK			
Room HEAT				
Room				
Room				
Room				

NOTE: Repeat Sections II, III, and IV for Each Additional Building at this Location.

COMMENTS: INTERIOR IN GOOD CONDITION - HOUSE IS NOT OCCUPIED AS YET. MUST CE THE BASEBOARDS HAVE GAPS UNDER THEM AT THIS NO. LISTED AS CRACKS IN HOUSE NO SHEET PILING

Inspector Bruce Stave Copy given to Owner Yes No CO. WILL SEND TO OCCUPANT

NAME: SAOIE KELLY ADDRESS: P.O. BOX 1657, KAMENJANAZ, 816033

Water Supply - PEABODY

Well () Cistern () Pond () Other (TANK)

Age () Drilled () Dug () Augered ()

Total depth () ft // Depth to water (static level) () ft

Casing (size and type) N/A

Gravel pack () Thickness and composition N/A

Driller N/A

Date drilled

Capacity test made () // When:

Done by:

Results:

Pump/Plumbing

Pump type () Pump depth () ft

Replacement or service:

Brief description of water system (pipe material, tanks, etc)

HAULS WATER TO HOLDING TANK AS NEEDED

Quantity-

Capacity (if known): 1000 GALS Approximate discharge: gpm

Ever haul water or lose supply: HAULED TO TANK

Seasonal fluctuations: NO

Consumption: Persons (3) Flush toilet (1) Shower/bath tub (1)

Automatic washer () Dishwasher () Livestock ()

Garden/lawn watering () Other uses ()

Recent changes in use () Date () Increase/Decrease

Details:

Water Quality-

Taste/odor () Sand () Color ()

Other ()

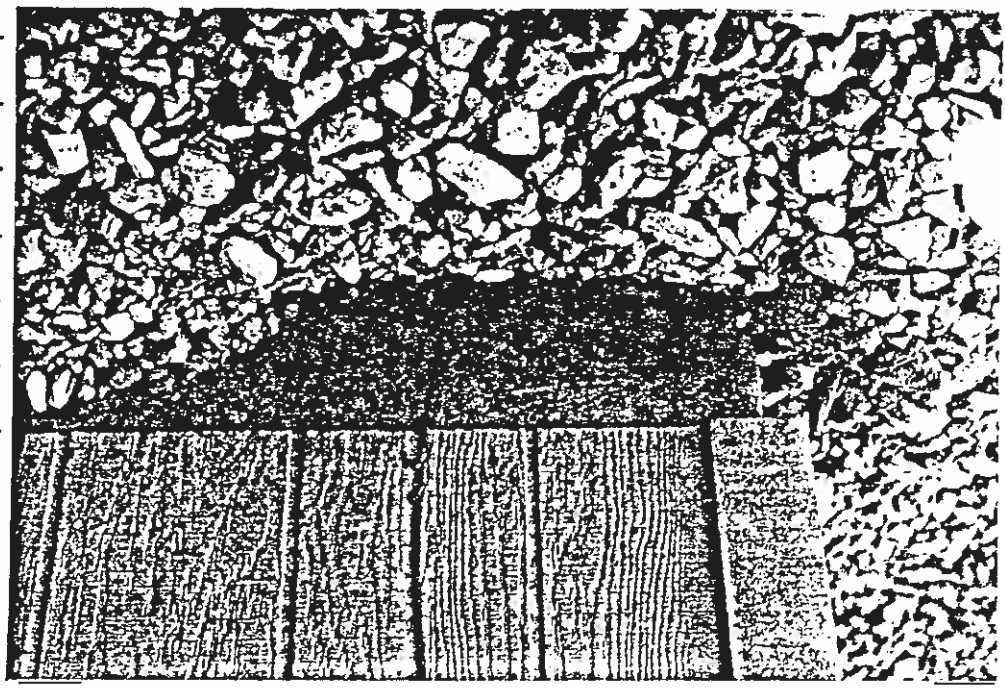
Factors affecting quality:

Water sample Yes () no ()

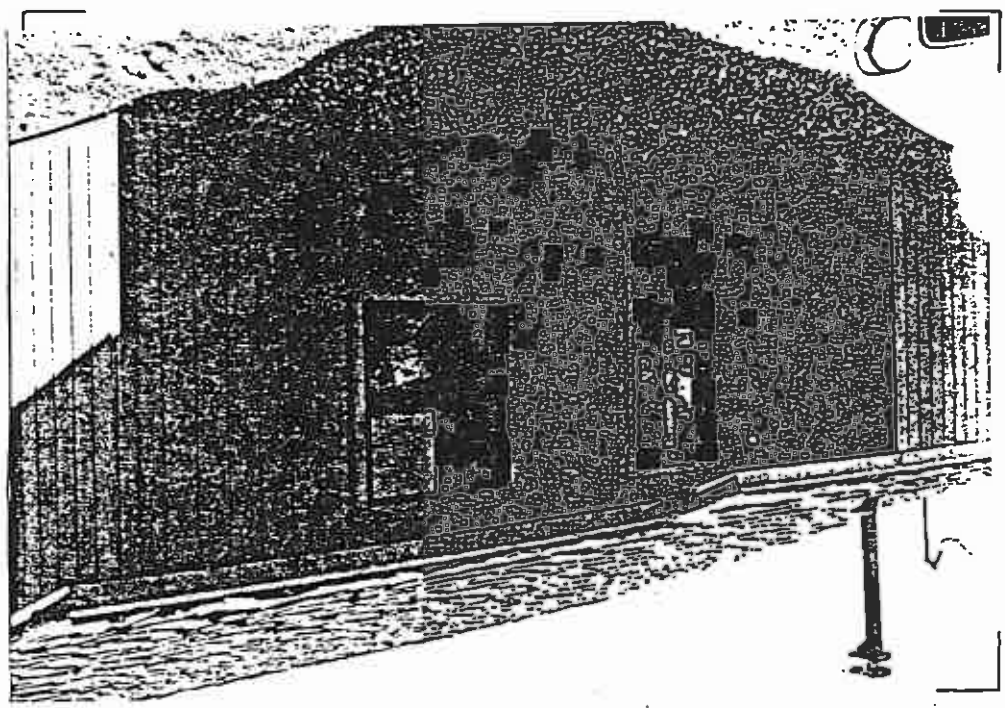
Historical Data and Previous Performance (give details):-

N/A

NO WATER LINE AS YET LAID FROM TANK TO RESIDENCE



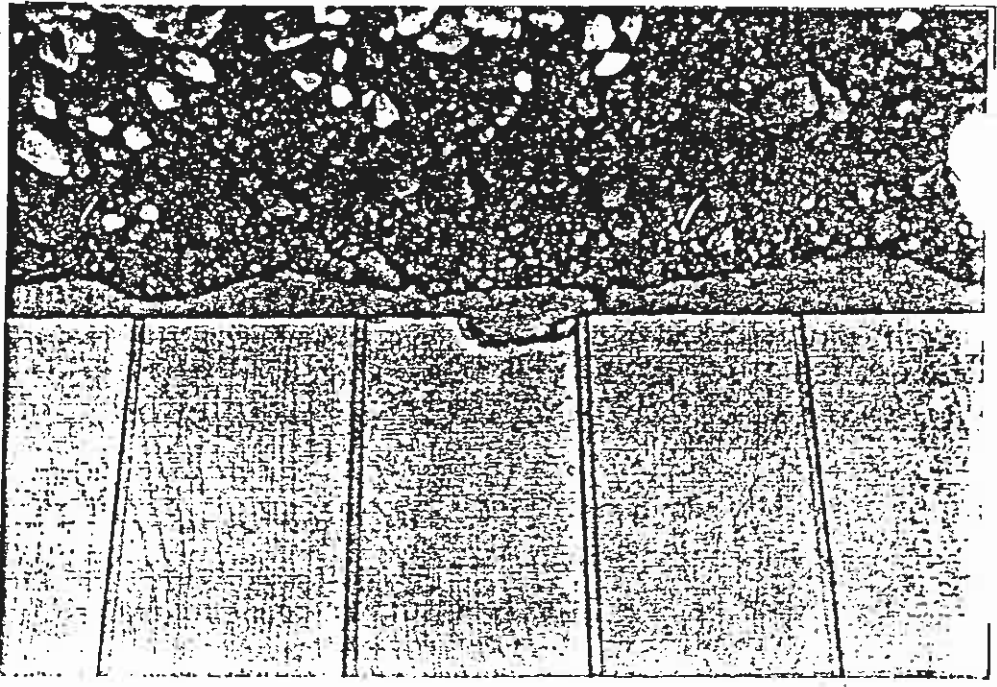
AT N/W CORNER -
DESCRIPTION BROOKLYN S.C.B.
PICTURE NUMBER 2



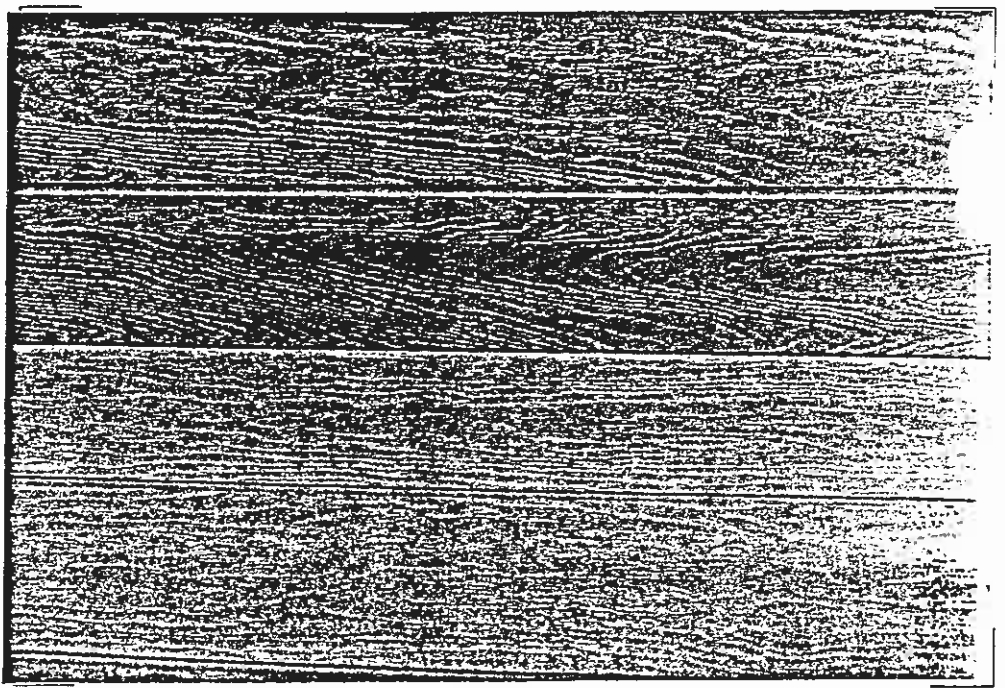
S.W. CORNER
DESCRIPTION
PICTURE NUMBER 1

PHOTO MOUNTING SHEET

Insured/Owner: SAOIE KERRY
Company Claim No. _____
Our File No. 152-86568
Date Taken 9-4-85
Adjuster B.S.F.
Film - Polaroid Negative



PICTURE NUMBER 4
 DESCRIPTION Blackboard
 PANELING UNDER
 F-WINDOW



PICTURE NUMBER 3
 DESCRIPTION SEPARATED
 AT PANEL JOINT
 AT E/DOOR AND
 FIRE PLACE

PHOTO MOUNTING SHEET

Insured/Owner

Company Claim No. _____

Policy No. _____

Date Taken _____

Adjuster _____

Polaroid Negative

PHOTO MOUNTING SHEET

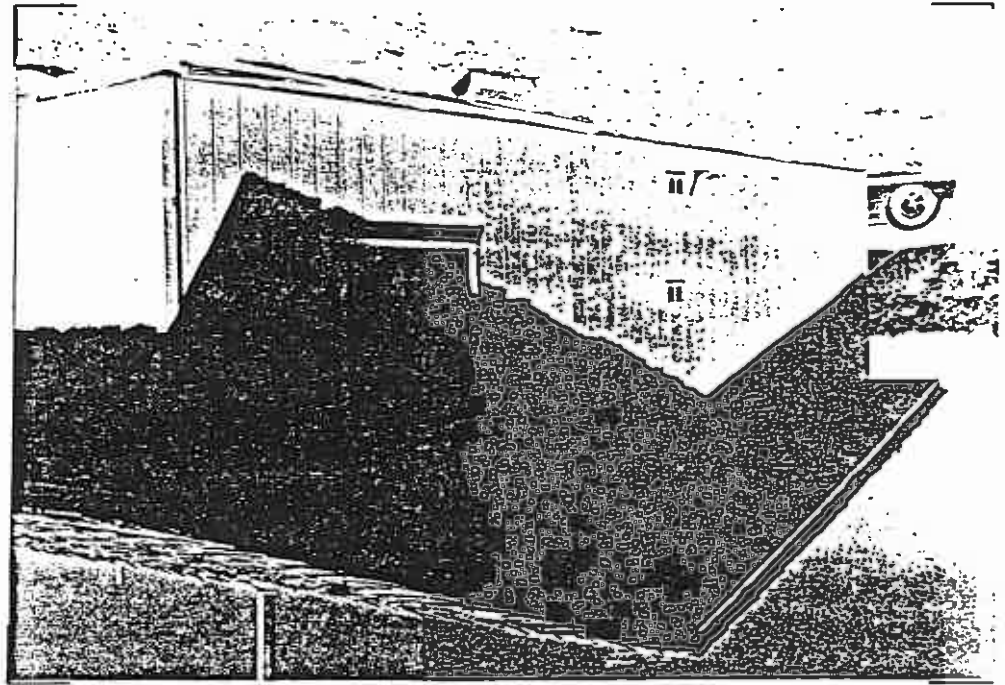
Insured/Owner _____

Company Claim No. _____

Policy No. _____

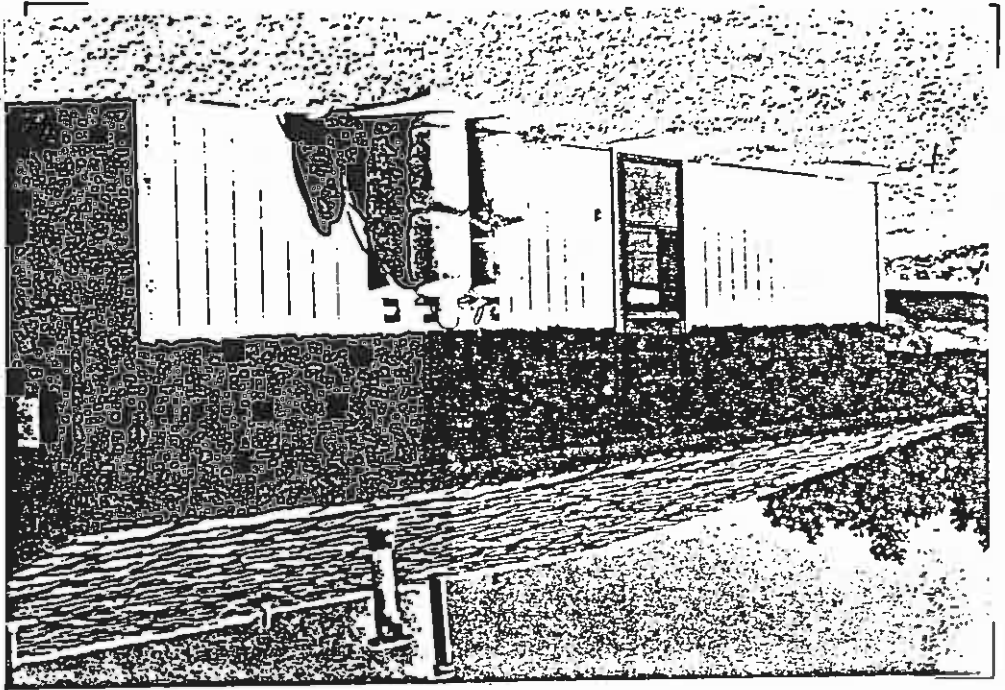
Our File No. _____ Date Taken _____

Film — Polaroid Negative Adjuster _____



PICTURE NUMBER 5

DESCRIPTION S. E. corner



PICTURE NUMBER 6

DESCRIPTION N. E. corner

PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____

Policy No. _____

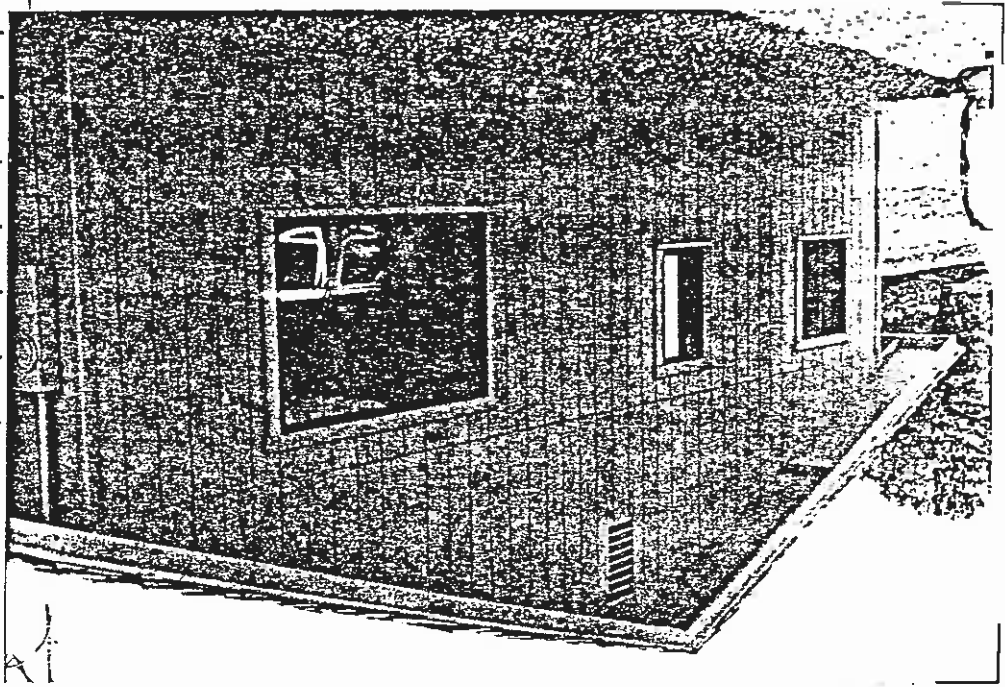
Our File No. _____

Date Taken _____

Film - Polaroid

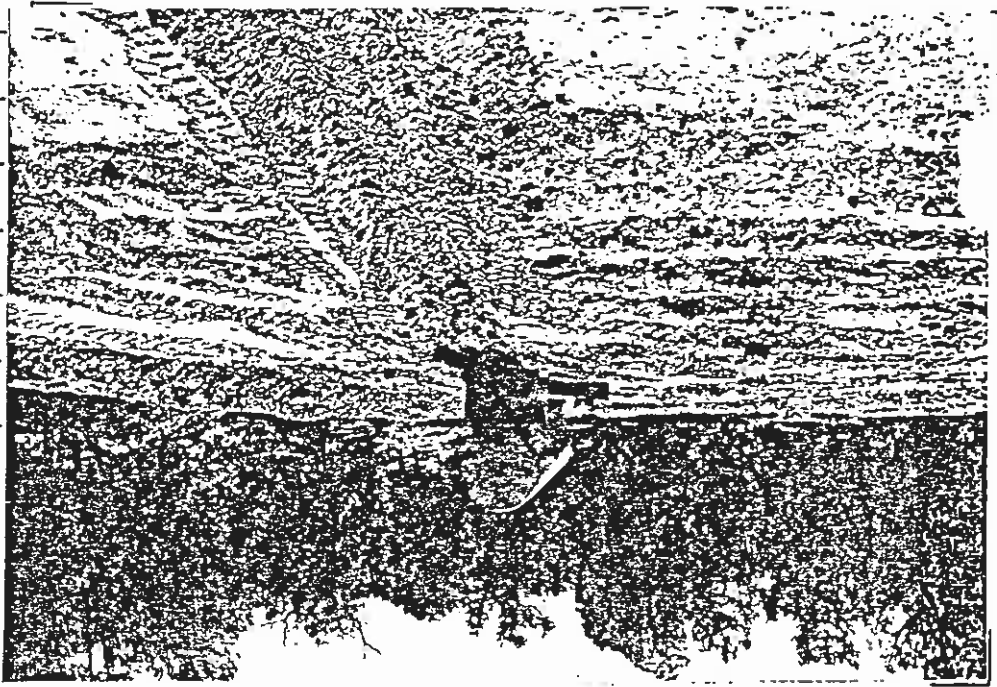
Negative

Adjuster _____



PICTURE NUMBER 7

DESCRIPTION N.W. corner



PICTURE NUMBER 8

DESCRIPTION THRU IS

East by south

of house on

built up frame

on grass - note

location of

PHOTO MOUNTING SHEET

Insured/Owner _____

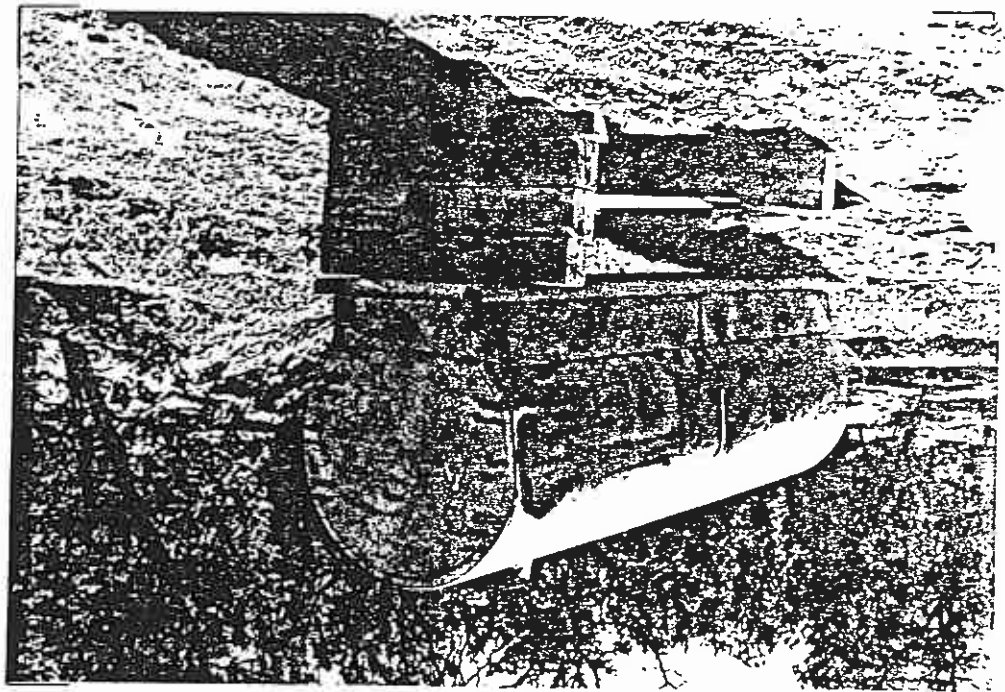
Company Claim No. _____

Policy No. _____

Date Taken _____

Our File No. _____

Film - Polaroid Negative Adjuster _____

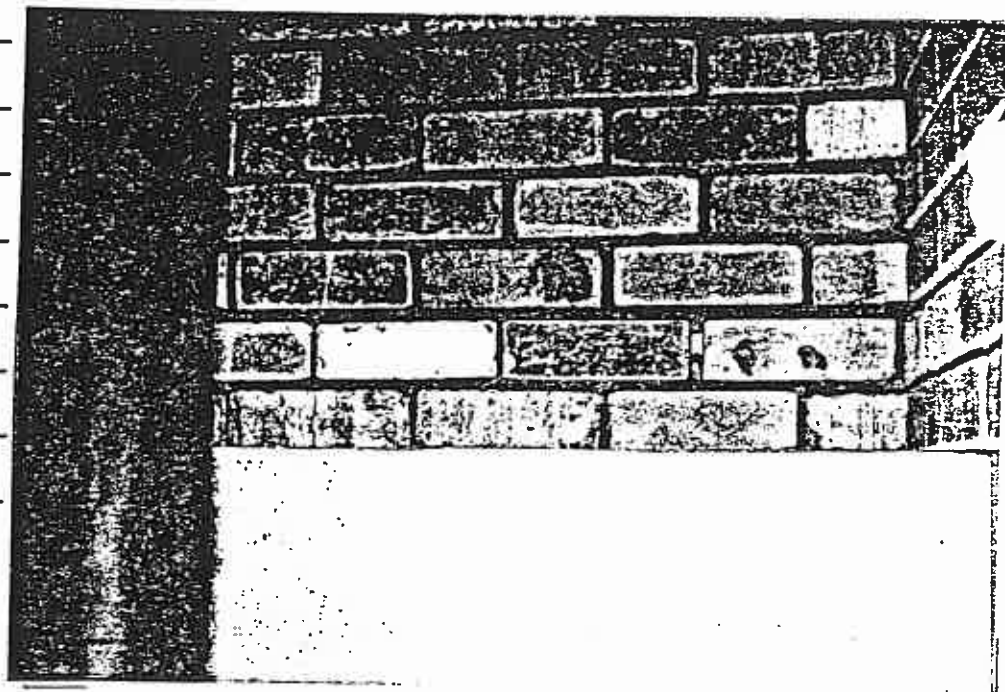


PICTURE NUMBER 9

DESCRIPTION CLOSE UP OF

#8 * HOLE ON

DAMAGE TO TANK.



PICTURE NUMBER 10

DESCRIPTION NEARER VIEW

IN SOME AREAS

JOINTS IN CURB

POOR WORK BEHIND

WOOD STOVE.

PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____

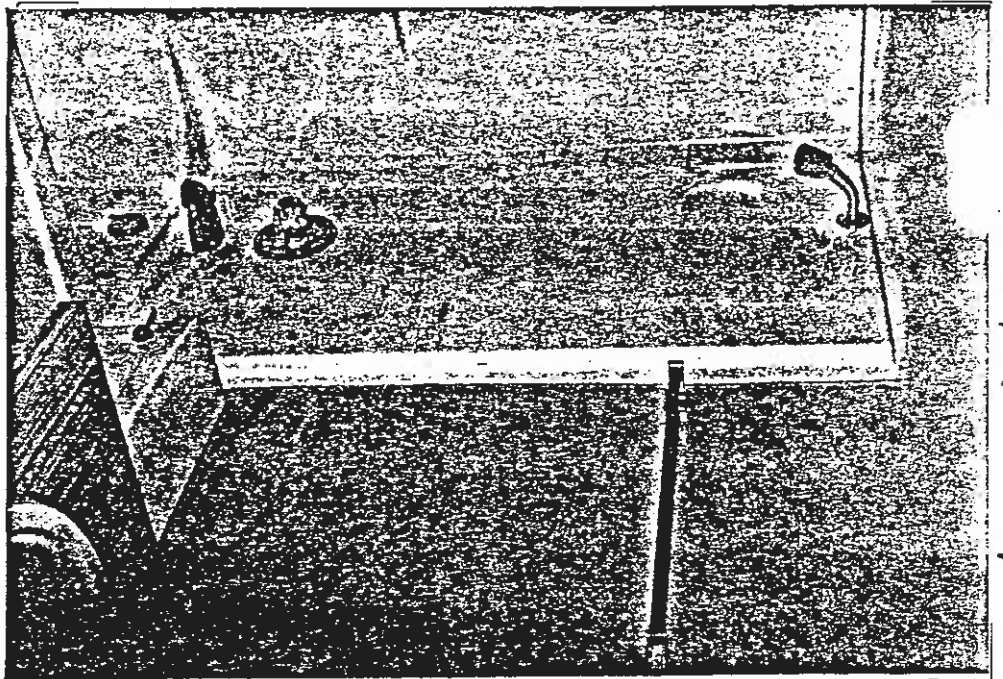
Policy No. _____

Date Taken _____

Adjuster _____

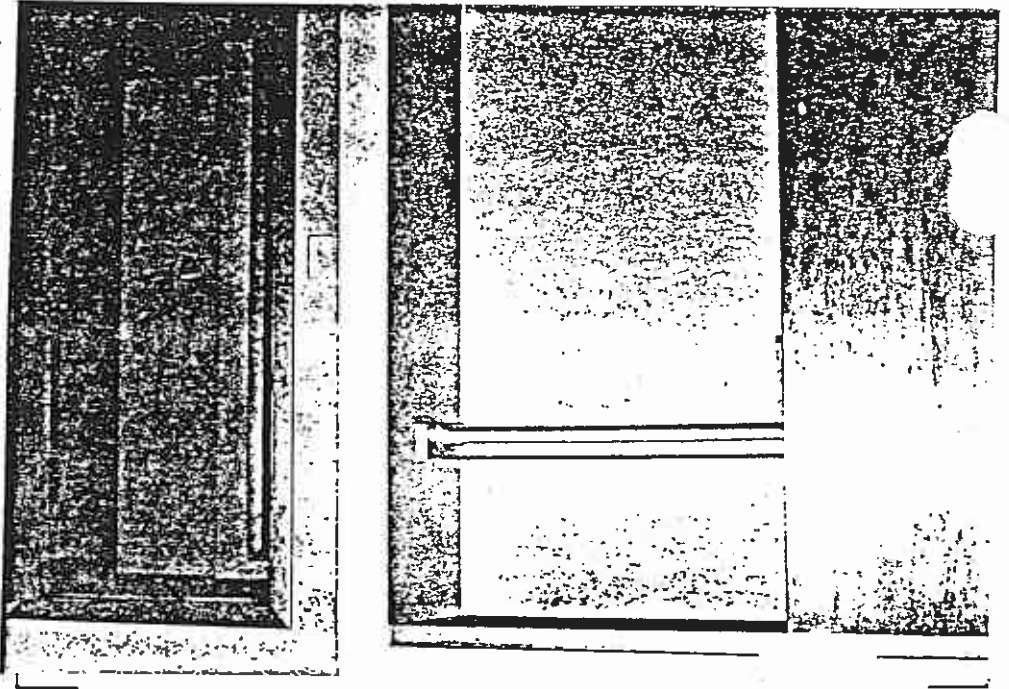
Negative

Film - Polaroid



DESCRIPTION *Bar Room*

PICTURE NUMBER 11

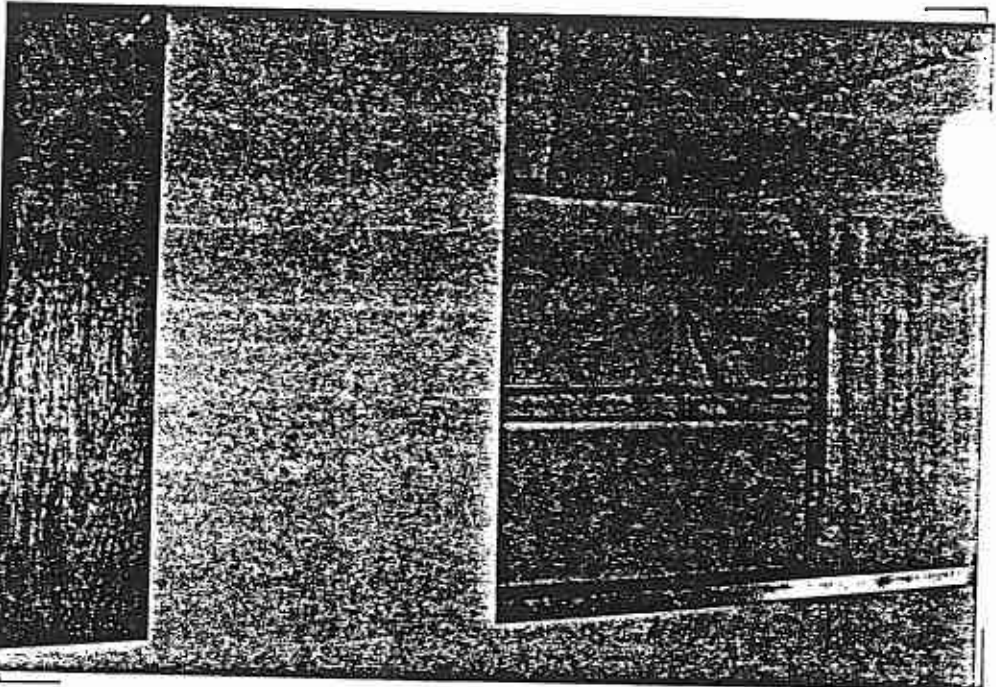


DESCRIPTION *Bar Room #1*

PICTURE NUMBER 12

DESCRIPTION

PICTURE NUMBER



DESCRIPTION

PICTURE NUMBER

Photo room #2

13

Insured/Owner

Company Claim No. _____

Policy No. _____

Date Taken _____

Our File No. _____

Film - Polaroid Negative Adjuster _____

PHOTO MOUNTING SHEET

PEABODY
NOTICE OF MINING

TO: Thomas Lake
P.O. Box 591
Blanding, Utah 84511

You are hereby given notice that Peabody intends to begin mining in the area indicated on the attached map on the following date:

Have already begun mining

If you own property or improvements within or half a mile of this area, your property or improvements will be affected by the mining operation and you have the right to request for a pre-blasting inspection of your property or improvements before mining begins, and if any of these properties or improvements are in the way of the mining, it must be moved and relocated out to any area not affected by mining.

I, Tom Lake, received and understand fully the content of the above notice, and I hereby give my consent; will not consent to have a pre-blasting inspection done on my property or improvements.

Signature

Tom Lake

Date

8-15-83

WITNESS:

PEABODY COAL COMPANY
 301 NORTH MEMORIAL DRIVE -- P.O. BOX 235 - ST. LOUIS, MISSOURI 63166

CONDITION REPORT

Location: N/IVEN File Number: ST. 86930-85E
 Date: 9-12-85 Time: 3:00 PM

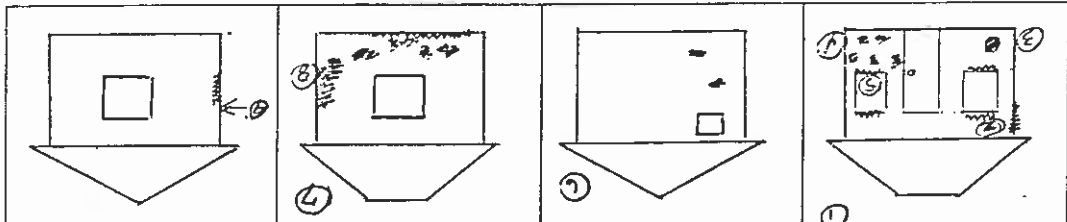
Property Address: N/IV

Occupant(s): TOM LAKE

Owner: TOM LAKE

Mailing Address: P.O. BOX 594, KAYENA AZ. 86033

Diagram of Structure Outline



CONDITION AND DEFECTS

Section II

Building No. Frame Brick Brick Veneer Stucco

Type: Dwelling Garage Shed Other

Number Stories: Overall Condition: Good Average Poor

EXTERIOR	(Material)
Roof	COMP-ROOFED
Siding	STUCCO
Door/Windows	WOOD FRAME
Chimneys	STONE PIPE
Floors	SLAB
Porch (es)	NONE

Roof Drainage Adequate: Yes No Porches: Yes No

Condition Downspout - Leaking: Yes No None

Condition Drain Tile - Leaking: Yes No None

Downspouts Drain To: Earth Sewers Catch Basin Splash

How Far Drainage Carried From Foundation: 2 Feet

Location Downspouts: N/A

Natural Lot Drainage Flows: N S W E

Is Erosion Visible Within Two Feet of Foundation? Yes No

Is Settlement Visible Around Foundation? Yes No

Has Drainage Contributed to Building Settlement? Yes No

What Area of Building? HALL Type: Water Supply Condition: GOOD

COMMENTS: EXTERIOR OF STRUCTURE IS IN GENERALY POOR

CONDITION, MAINLY LOST MANY PARTS OF STUCCO

THE WINDOW AND DOOR FRAMES ARE IN POOR

CONDITION. FRAME IS EXPOSED IN EAST WINDOWS.

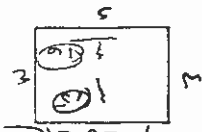
INTERIOR CONDITION
Section IV

STRUCTURE HAS

only one room

Room	(13) □	(10) □	(11) □	(12) □	(14) □
Material					

N
E
S
W



Room	A diagonal line from the top-left corner to the bottom-right corner.			
Material				

• Rectangles indicate Windows and Doors
• Wavy Lines indicate Cracking of Wall Covering Material

Room				
Material				
Room				
Material				
Room				
Material				
Room				
Material				
Room				
Material				
Room				
Material				

NOTE: Repeat Sections II, III, and IV for Each Additional Building at this Location.

COMMENTS: SINGLE ROOM STRUCTURE - INTERIOR HAS BEEN
UPGRADED WITH BASTIC BOARD ON WALLS AND SHEET
ROCK ON CEILING. SHEET ROCK ON CEILING IS BULGING
FREE AND HANGING IN SOME PLACES. FLOOR HAS
CRACKING ON BOTH SIDES WITH SEPM IN CENTER
LEFT TO RIGHT

Basht

Inspector

Copy given to Owner

Yes

No

C.I. WITH S AND TO OCCUPANT

WATER WELL SURVEY

NAME: TOM LACE ADDRESS: PO. BOX 947, KAYENTA AZ, 860

Water Supply - PEARSON

Well () Cistern () Pond () Other (AS NEEDED)

Age () Drilled () Dug () Augered ()

Total depth () ft // Depth to water (static level) () ft

Casing (size and type) N/A

Gravel pack () Thickness and composition N/A

Driller N/A Date drilled

Capacity test made () // When:

Done by:

Results:

Pump/Plumbing

Pump type () Pump depth () ft

Replacement or service:

Brief description of water system (pipe material, tanks, etc)

Quantity-

Capacity (if known): N/A Approximate discharge: N/A gpm

Ever haul water or lose supply: YES FROM PEARSON

Seasonal fluctuations: NO

Consumption: Persons (S) Flush toilet (W) Shower/bath tub (M)

Automatic washer () Dishwasher () Livestock ()

Garden/lawn watering () Other uses ()

Recent changes in use () Date () Increase/Decrease

Details:

Water Quality-

Taste/Odor () Sand () Color ()

Other ()

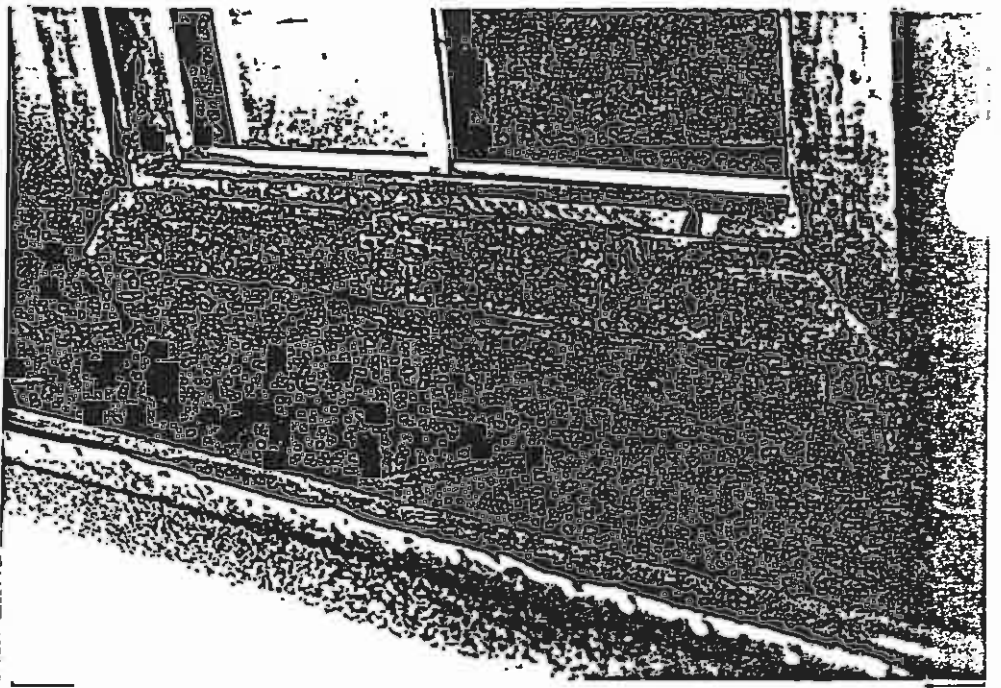
Factors affecting quality:

Water sample yes () no ()

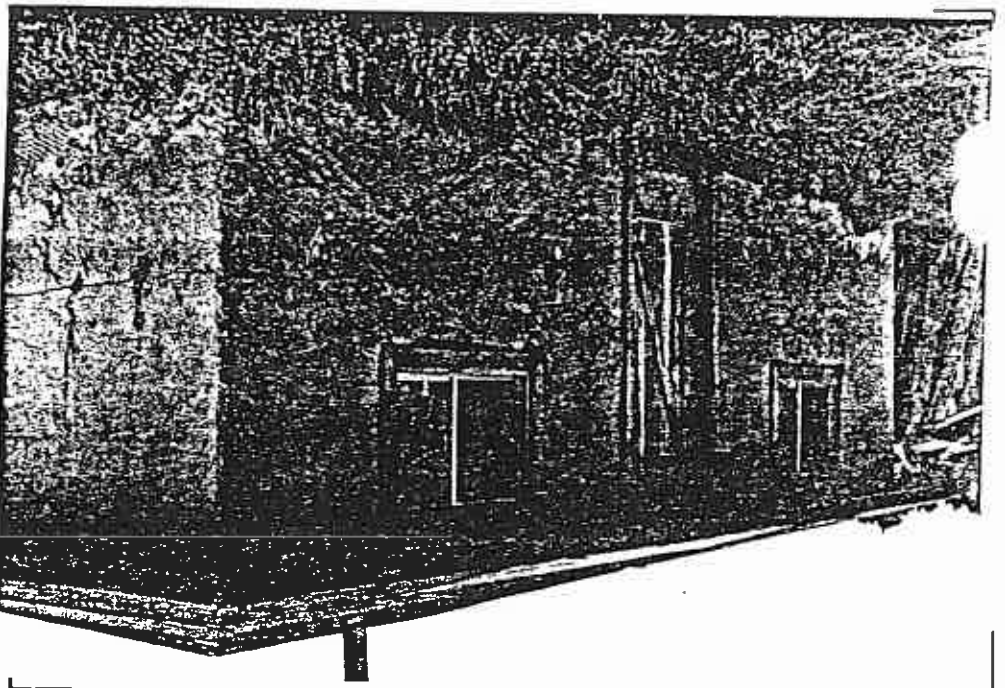
Historical Data and Previous Performance (give details):-

OCCUPANT HAS NO HOLDING TITLES HE HAD

WATER AS NEEDS IT.



DESCRIPTION SOUTH WINDOW
PICTURE NUMBER 2
00 6/5/08



DESCRIPTION N.E. CORNER
PICTURE NUMBER 1

PHOTO MOUNTING SHEET

Insured/Owner

TOM LAKE

Company Claim No.

Policy No.

Our File No. 152-86730-85F

Date Taken 9-16-87

Film - Polaroid

Negative

Adjuster

BSF

PHOTO MOUNTING SHEET

Insured/Owner _____

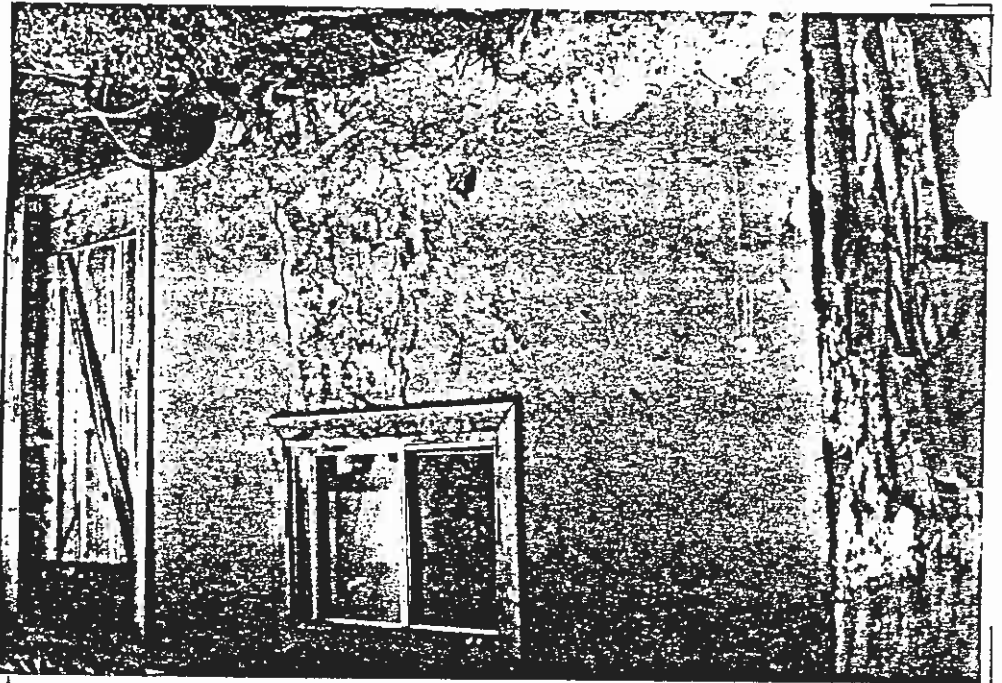
Company Claim No. _____

Policy No. _____

Our File No. _____

Date Taken _____

Polaroid Negative Adjuster _____



PICTURE NUMBER

3

DESCRIPTION

Below

SOUTH WINDOW OR

3/5/03

PICTURE NUMBER

f

DESCRIPTION

N/E END OF

3-5104



PHOTO MOUNTING SHEET

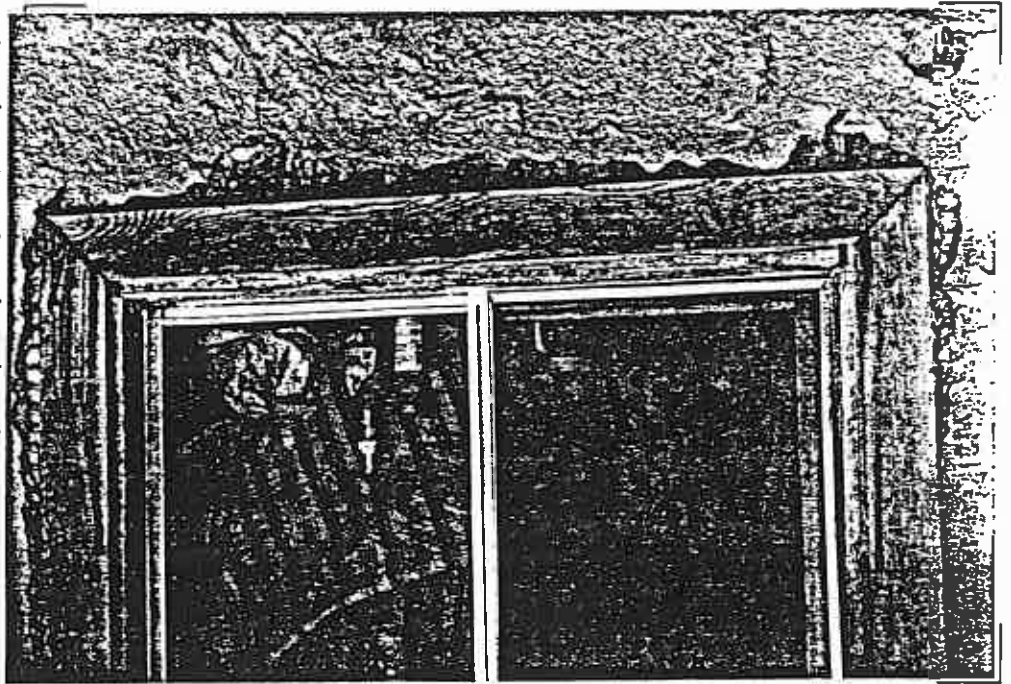
Insured/Owner _____

Company Claim No. _____

Policy No. _____

Our File No. _____ Date Taken _____

Film -- Polaroid Negative Adjuster _____

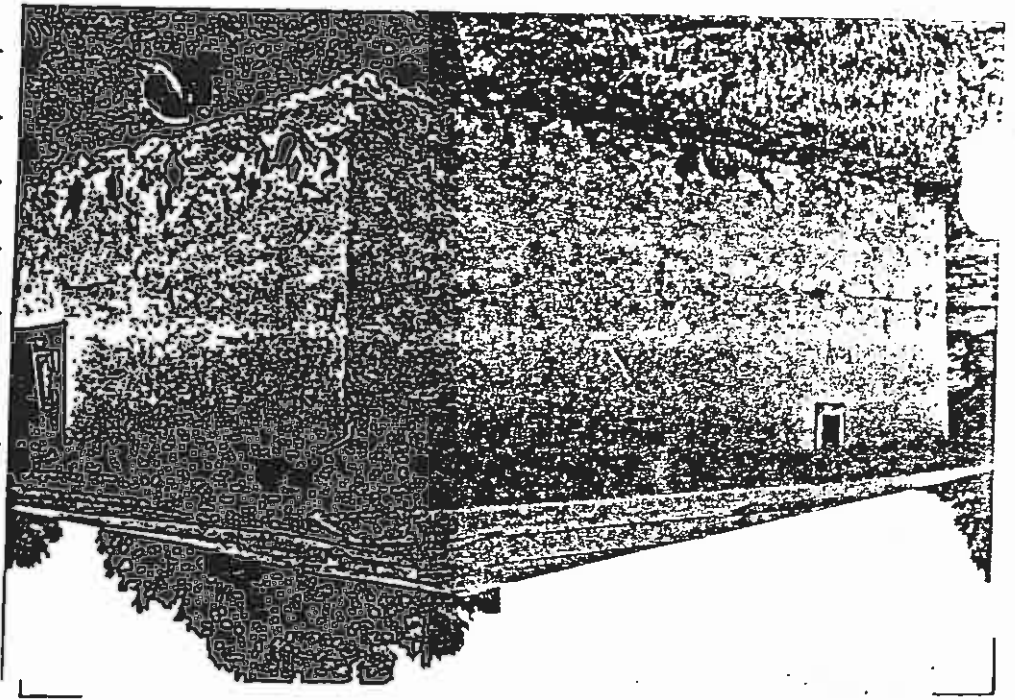


02/5/08

DESCRIPTION N/W WINDOW

5

PICTURE NUMBER



PICTURE NUMBER

6

DESCRIPTION

N/W CORNER

PHOTO MOUNTING SHEET

Insured/Owner _____

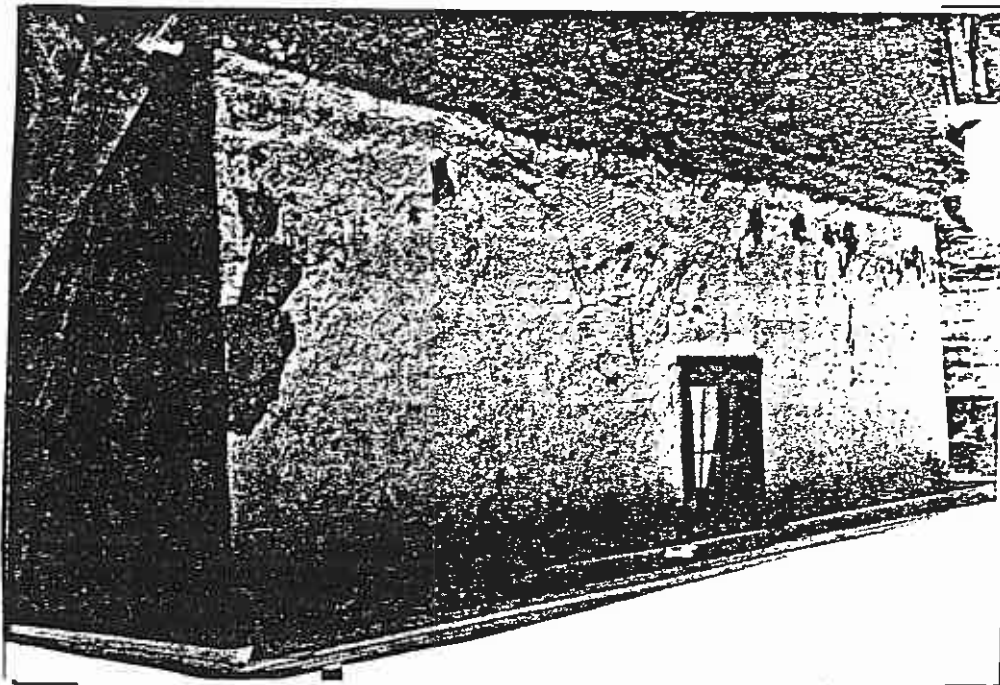
Company Claim No. _____

Policy No. _____

Our File No. _____

Date Taken _____

Film - Polaroid Negative Adjuster _____

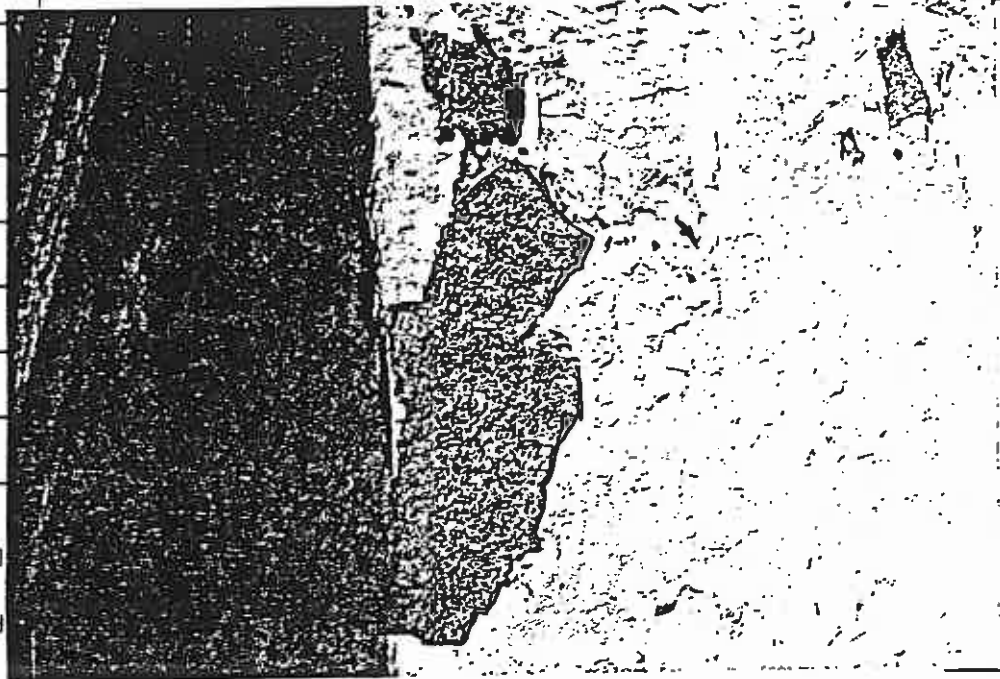


PICTURE NUMBER

7

DESCRIPTION

S/W CORNER



PICTURE NUMBER

8

DESCRIPTION

SOUTH END

02 W/S.03

PHOTO MOUNTING SHEET

Sured/Owner

Company Claim No. _____

Policy No. _____

Our File No. _____

Date Taken _____

Film - Polaroid Negative Adjuster _____



PICTURE NUMBER

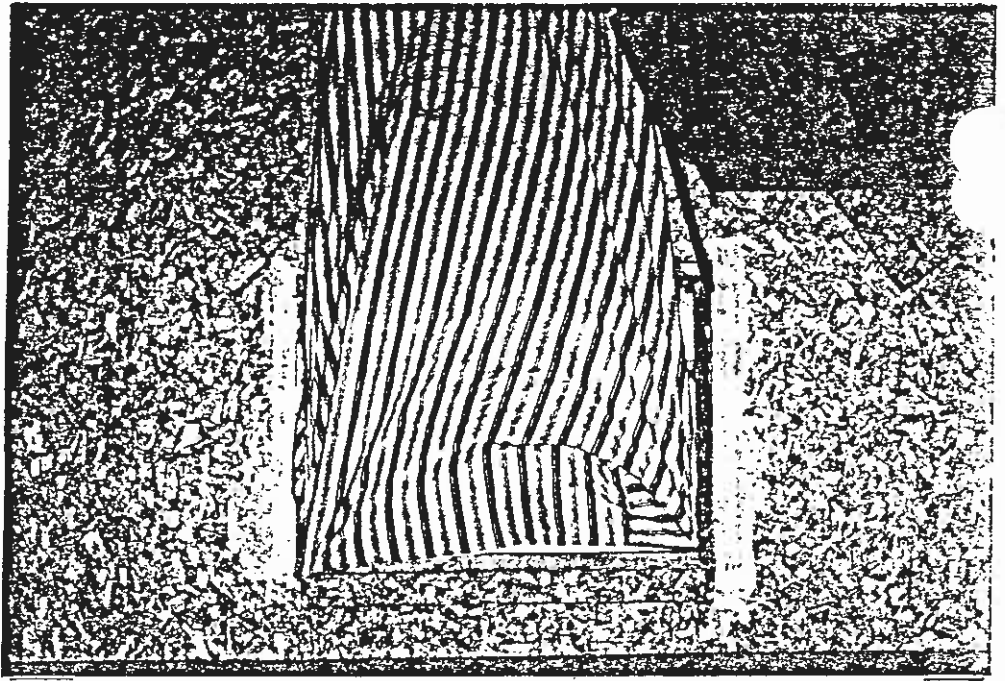
9

DESCRIPTION

WOOD STORE

ACCESSIBLE DOOR

BUILDING NOT



PICTURE NUMBER

10

DESCRIPTION

WATER - SWINDS

PHOTO MOUNTING SHEET

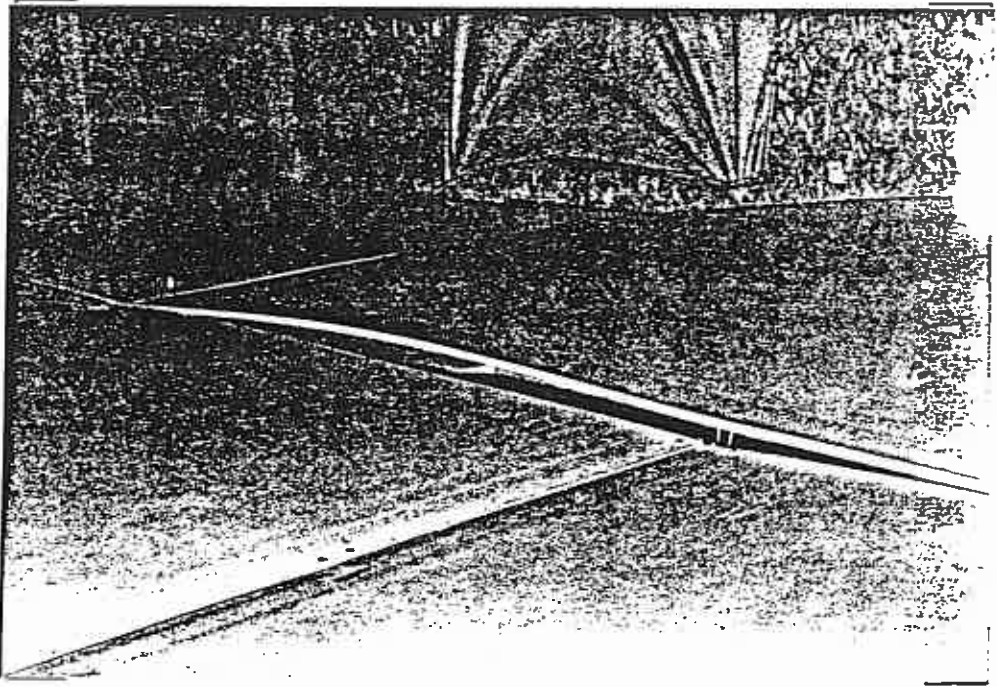
Insured/Owner _____

Company Claim No. _____

Policy No. _____

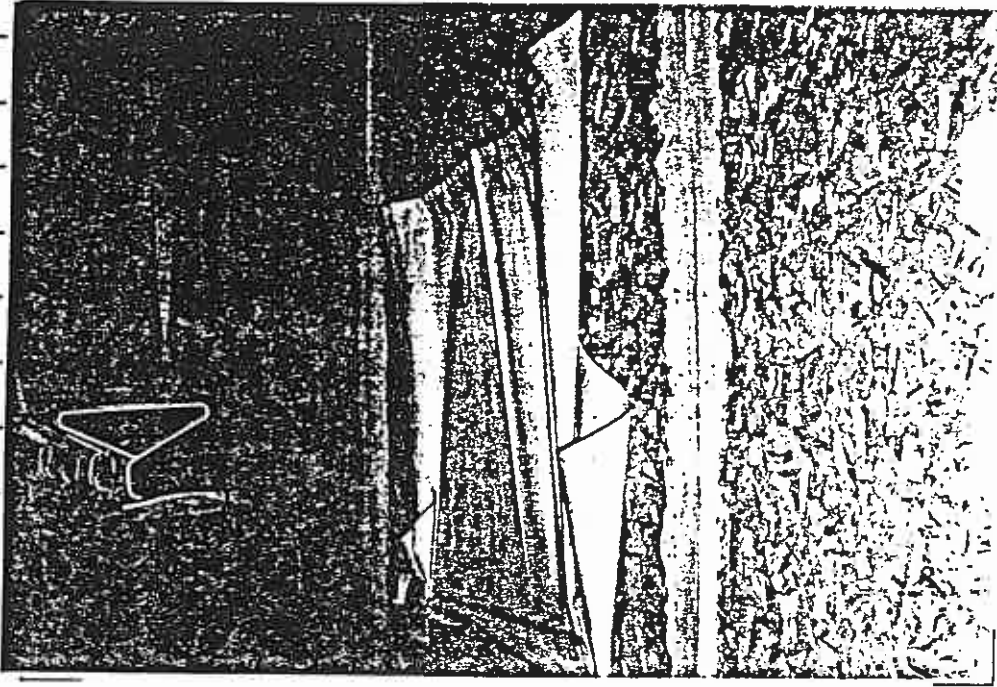
Our File No. _____ Date Taken _____

Film - Polaroid Negative Adjuster _____



PICTURE NUMBER 11

DESCRIPTION S - window



PICTURE NUMBER 12

DESCRIPTION Window

PHOTO MOUNTING SHEET

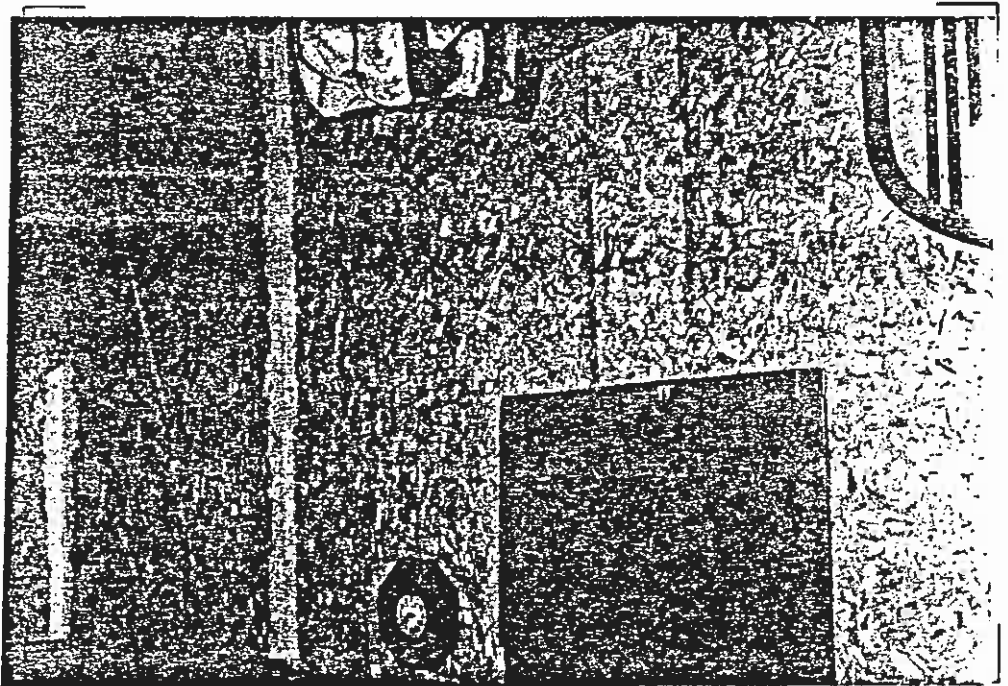
Insured/Owner

Company Claim No. _____

Policy No. _____

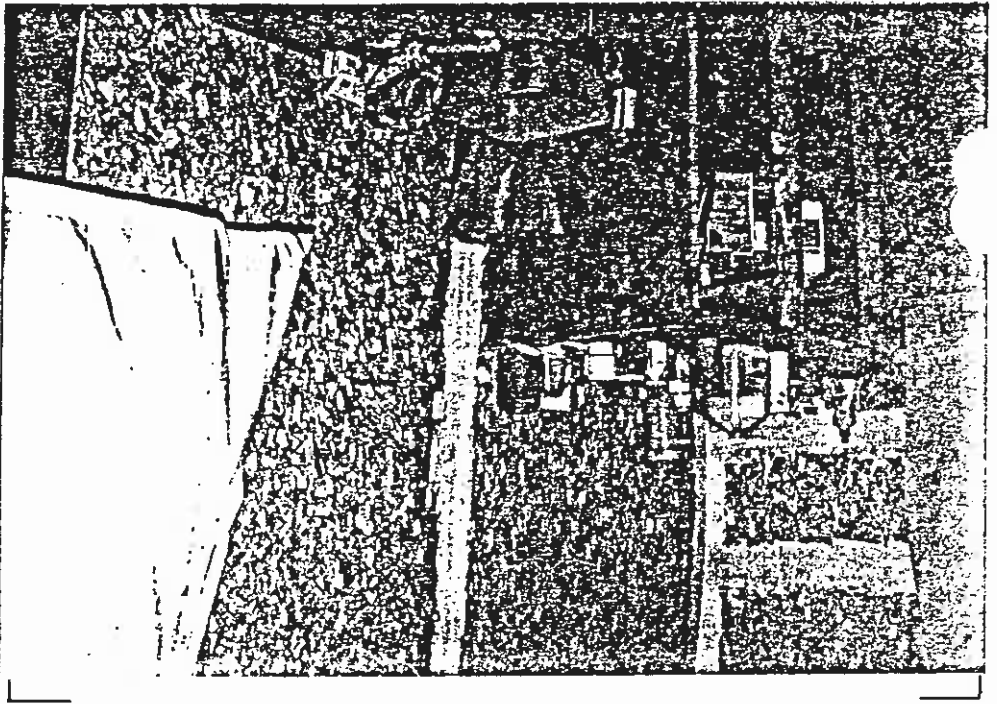
Our File No. _____ Date Taken _____

Film - Polaroid Negative Adjuster _____



DESCRIPTION N-Wall

PICTURE NUMBER 13



DESCRIPTION Stairs

PICTURE NUMBER 14

Corridor

PHOTO MOUNTING SHEET

Sured/Owner

Company Claim No. _____

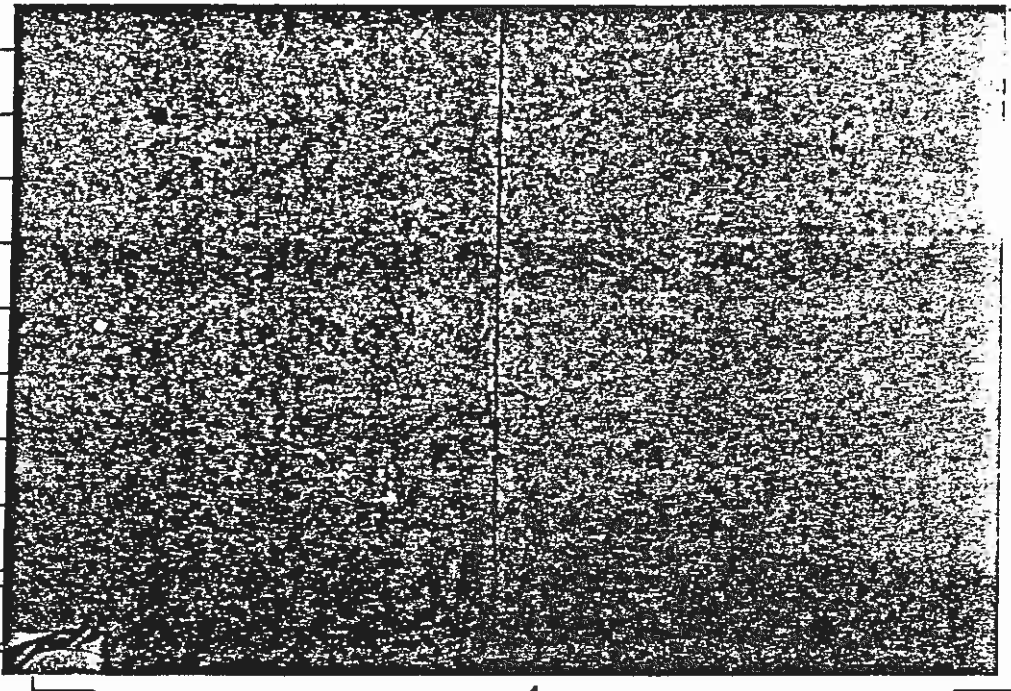
Policy No. _____

Date Taken _____

Adjuster _____

Film - Polaroid

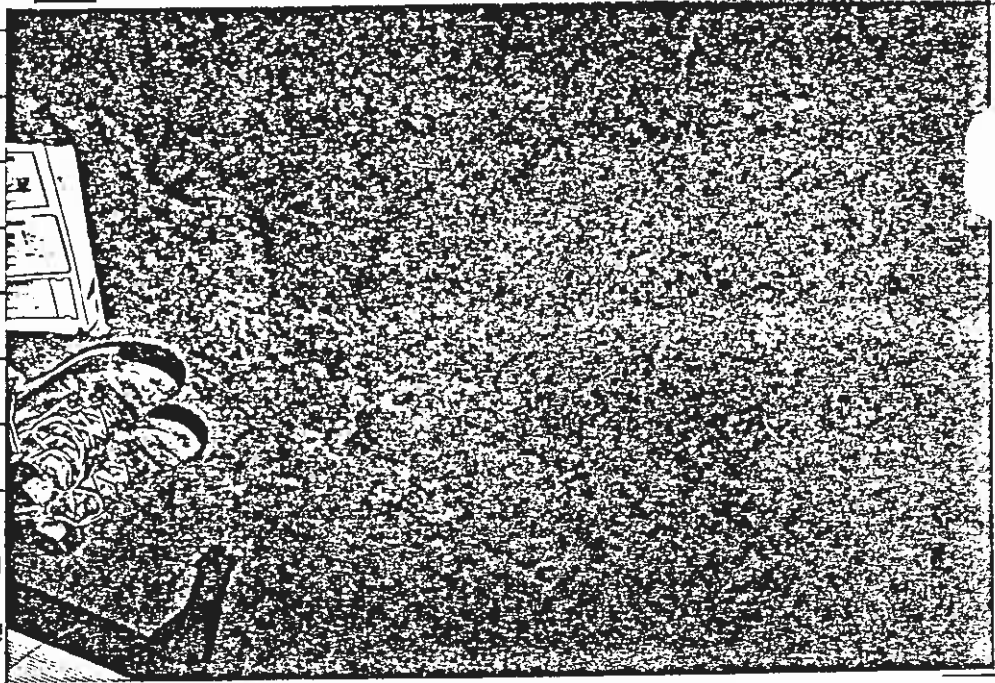
Negative



DESCRIPTION _____

PICTURE NUMBER _____

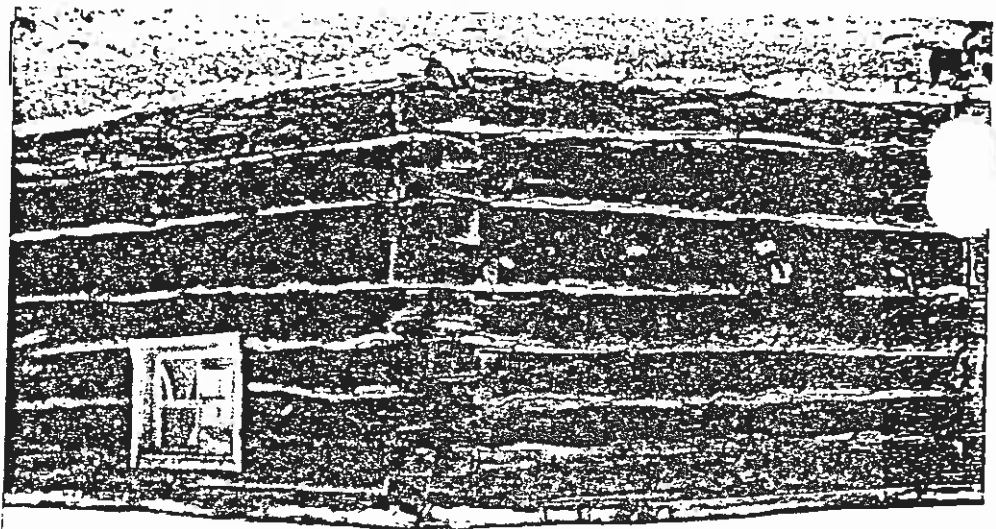
Floor cracks



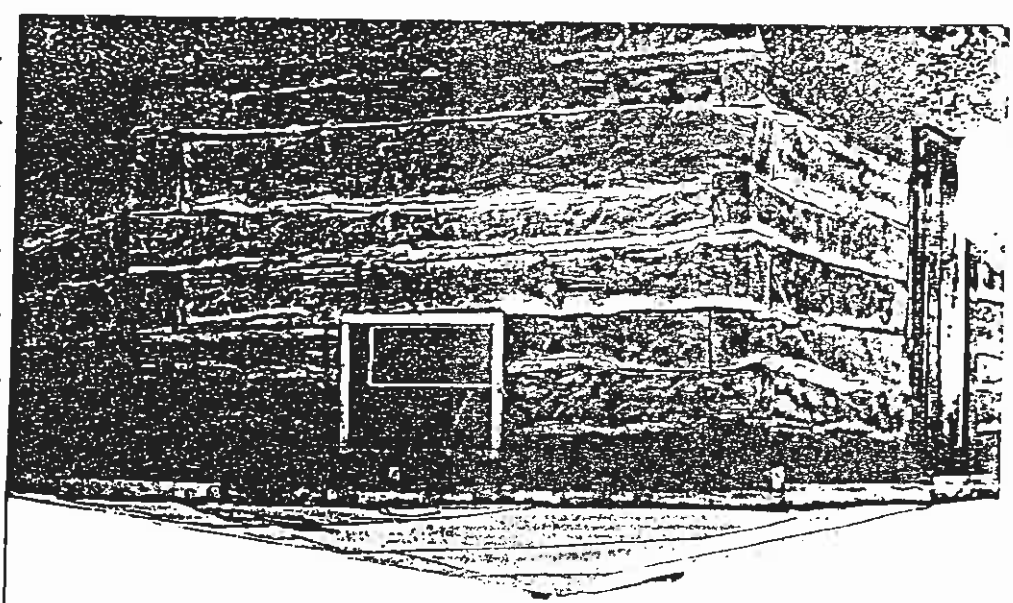
DESCRIPTION _____

PICTURE NUMBER _____

Floor cracks



DESCRIPTION S - WEST SIDE
PICTURE NUMBER 18



DESCRIPTION N - S. OF
PICTURE NUMBER 17

PHOTO MOUNTING SHEET

Insured/Owner _____

Company Claim No. _____

Policy No. _____

Date Taken _____

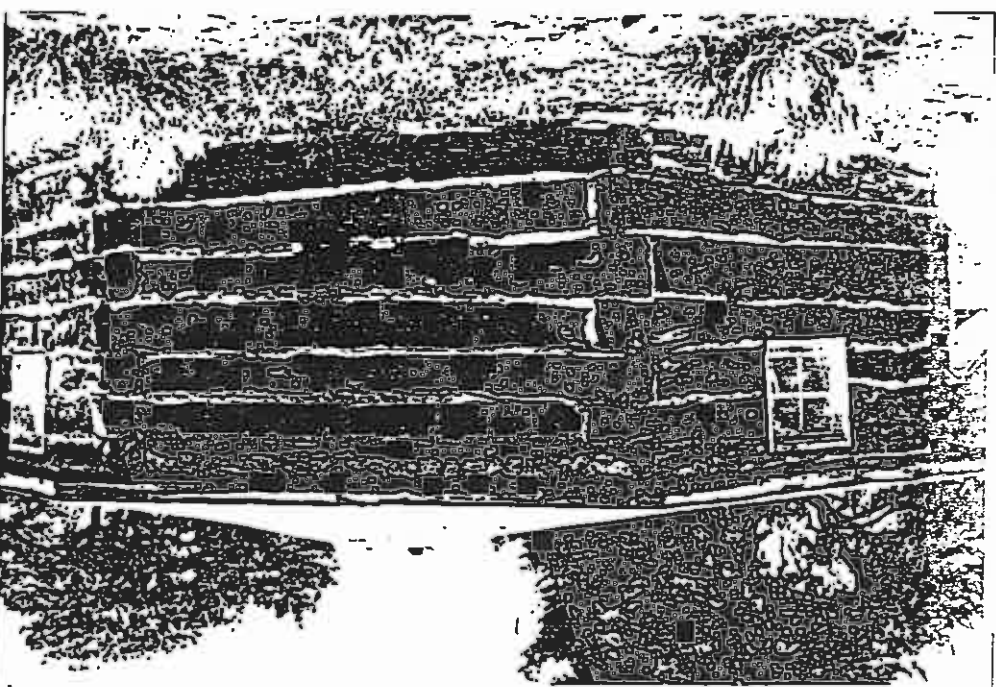
Adjuster _____

Film - Polaroid

Negative

DESCRIPTION

PICTURE NUMBER



DESCRIPTION

PICTURE NUMBER

19

S-E-5-03

ured/Owner

Company Claim No. _____

Policy No. _____

Our File No. _____ Date Taken _____

Film - Polaroid Negative Adjuster _____

PHOTO MOUNTING SHEET

BLAST MONITORING PLAN

ATTACHMENT 5

referenced monthly reports.

Albuquerque field office. The quarterly report included the same data as the above quarterly reports were submitted within 60 days of the quarter's close to OSM's within 20 days of the end of each monthly reporting period. Beginning January 2008, OSM's Albuquerque field office (OSM/AFO) and OSM's Western Support Center (OSM/WSC) collected for each blast, and a cover letter summarizing the data was provided to both data (including the actual seismic wave form), the airblast and blasting log data thru December 2007, blasting records, seismic calibration certificates, and measurement

air overpressure.

airblast is triggered by an airblast, the trigger level will be no greater than 132.6 dBL with the results given in decibels (dBL). If the portable instrument used to record than 0.50 inches per second particle velocity. Airblast measurements will be recorded measurements is seismically triggered, it will be set at a trigger level of not greater frequency for each direction of motion. If the portable seismograph used to record those ground motion measurements will include the highest peak particle velocity and critical

consultation with OSM.

received permission from the resident. Instrument locations were determined in relationship to the blast areas. The instruments are placed at dwellings which FWCC has the vicinity of blasting areas, Drawing No. 94700 shows each instrument location in blast will also be monitored for airblast. Because there are no specific addresses in 816.67(d)(3) for determining the maximum pounds of explosives detonated per delay. Each recording seismograph monitors, FWCC utilizes the scaled-distance formula at 30 CFR in addition to the above permanently installed three directional particle velocity

in 2007 once blasting activities were completed in the N-6 mining area. Dugout valley was added in spring 2006. Monitoring at the two N-6 sites was discontinued recording locations and portable instrumentation. A seventh site located north of J19 in vibration and air overpressure monitoring program on April 15, 1994 using six permanent 7, 1995 pertaining to certain aspects of blasting. FWCC implemented a continuous ground August 10, 1994 and conversations with OSM on July 13, 1994, January 31, 1995, and March The described plan herein, addresses the Revision Order dated February 24, 1994 and

BLAST MONITORING PLAN

Peabody plans to discontinue the permanent monitoring program and associated reporting during July 2010. FWCC will utilize the Scaled Distance Formula in 30 CFR 816.67 (d) (3) for determining the maximum allowable pounds of explosive to detonated in any 8 millisecond period. If a blast design exceeds the scaled distance formula, FWCC will set up a portable seismograph to monitor the blast at the nearest residence location determined in consultation with OSM (see drawings nos. 94700 and 94720). The portable seismograph will be set to trigger at .05 inches per second peak particle velocity and 128 dbL air overpressure. The record of the seismic monitoring will be printed and attached to the corresponding blast report which will be filed at the mine office for a period of three years and available for inspection.

Except as provided immediately below, blasting will be restricted to the daytime hours between sunrise and sunset. FWCC may blast at times other than during daytime hours (unscheduled blasts) where required for public or operator health and safety and for emergency blasting actions. When an unscheduled blast occurs, FWCC will document the reasons for the unscheduled blast, as well as the conditions of health and safety or emergency that required the blast. This documentation shall be provided in the blasting statement, Figure 1.

PRE-BLAST SURVEY SITES MAP DRAWING 94720 RESIDENT LIST

ATTACHMENT 6

NAME	2004 NUMBER	PREVIOUS NUMBER	STATUS	PWCC EASTING	PWCC NORTHING
BEGAY , BILTA	9.1	1.1	Occupied	73147	-52302
BEGAY , BILTA	9.4	1.2	Occupied	73100	-52300
BEGAY , DANNY	10.1	2.0	Occupied	72950	-52300
BEGAY , DANNY	10.0	3.0	Occupied	73217	-52396
BEGAY , DANNY	10.0	3.0	Occupied	73212	-53065
KESOLI , KEE JOHN/HELEN	64.0	4.0	Occupied	56972	-52497
KESOLI , KEE JOHN/HELEN	64.1	5.0	Occupied	57025	-52381
KESCOLI , MAXINE	63.1	6.0	Occupied	58003	-52045
LITTLE , JIMMIE/TERESA	79.1	7.0	Occupied	57058	-52478
BEGAY , BILTA	9.3	8.0	Occupied	55399	-52434
BEGAY , BILTA	9.0	9.0	Occupied	55431	-52299
RUSSELL , JERRY	89.0	10.0	Occupied	55340	-52545
RUSSELL , KEE/JULIA	90.0	11.0	Occupied	55418	-52613
PULINOS , GEORGE/MAE	88.1	14.0	Occupied	55144	-49446
SHERLOCK , TOM/JULIA	96.0	15.0	Occupied	55981	-49459
YAZZIE , ALICE	107.3	18.0	Occupied	54941	-49982
CHARLEY , KATIE	23.1	40.0	Occupied	77707	-31802
CHARLEY , KATIE	23.0	41.0	Occupied	77717	-31751
KELLY , SADIE/PRESTON	61.0	44.0	Occupied	67362	-26023
YAZZIE , PRISCILLA	111.1	45.0	Occupied	65880	-25559
YAZZIE , MARYLYN	111.0	46.0	Occupied	66045	-25408
TSO , ROY/ALICE	102.1	47.0	Occupied	44927	-21578
TSO , ROY/ALICE	102.0	48.0	Occupied	44745	-21570
CHIEF , BILL/SALLY	24.2	49.0	Occupied	60453	-15514
CHIEF , BILL/SALLY	24.0	50.0	Occupied	60557	-15478
JIM , MABEL/BENNIE	55.0	51.0	Occupied	62235	-15923
JOHNSON , SPENCER	59.1	52.0	Occupied	60721	-15011
RUSSELL , KEITH/PAULETTA	91.0	53.0	Occupied	60066	-15310
RUSSELL , KEITH/PAULETTA	91.1	54.0	Occupied	60147	-14977
YAZZIE , ROSE	112.5	55.0	Occupied	60433	-13457
YAZZIE , ROSE	112.4	56.0	Occupied	60519	-13375
YAZZIE , ROSE	112.3	57.0	Occupied	60522	-13570
CRANK , LILLY	38.0	61.1	Occupied	52827	-14605
CODY SR. , JAMES	31.0	62.0	Occupied	50224	2295
YAZZIE , ALICE	107.2	0.0	Occupied	29465	10017
YAZZIE , ALICE	107.1	65.0	Occupied	28579	6491
YAZZIE , ALICE	107.0	66.0	Occupied	28650	6429
ALBERT , EARLENE	2.0	71.0	Occupied	17322	-11246
ESTILTY , CALVIN	45.2	72.1	Occupied	38102	-10416
ESTILTY , CALVIN	45.1	72.2	Occupied	38064	-11032
BEGAY , GEORGE/LENA	12.0	73.0	Occupied	37837	-11453
ESTILTY , PHILLIP	48.0	74.0	Occupied	37666	-11343
ESTILTY , PHILLIP	48.1	75.0	Occupied	37704	-11297
LUNA , BESSIE	83.1	76.0	Occupied	16286	-7739
ALBERT , ALTA R.	1.0	78.0	Occupied	18163	-10886
HERRERA , ANNIE	53.1	79.0	Occupied	18802	-10533
CRANK , ALBERT	32.1	80.0	Occupied	20242	-15736
CRANK , BETTY	33.4	81.0	Occupied	20001	-16199
CRANK , BETTY	33.3	82.0	Occupied	20197	-16050
BECENTI , IRENE/KEVIN	6.2	83.0	Occupied	20356	-16059
CRANK , BETTY	33.2	84.0	Occupied	20399	-16006
CRANK , BETTY	33.1	85.0	Occupied	20452	-15949

2004	PREVIOUS	STATUS	EASTING	NORTHING	NAME
301.0	86.0	occupied	21035	-16355	B.M. BIBLE CHURCH
37.0	87.0	occupied	21169	-15342	CRANK , LEONARD
86.0	88.0	occupied	21102	-15650	NELSON , EDCLY
49.0	89.0	occupied	20657	-15658	ESTILLY , STEVEN/IRENE
50.0	90.0	occupied	20756	-15657	FARLEY , CORNELIUS/GRACE
53.0	91.0	occupied	21229	-15083	HERRERA , ANNIE
57.0	92.0	occupied	20638	-15918	JOHNSON , MILTON/LILY
80.0	93.0	occupied	20514	-15792	LITTLE , ROBERT
95.0	94.0	occupied	20814	-15319	SEATON , EVELYN
101.0	95.0	occupied	20401	-16321	TALTMAN , FANAE/STANLEY
51.0	97.0	occupied	9125	-24125	FREEMAN , IRENE
33.5	98.0	occupied	19423	-19958	CRANK , BETTY
25.1	99.0	occupied	20779	-24344	CHIEF , JACK
25.0	100.0	occupied	20855	-24380	CHIEF , JACK
26.0	102.0	occupied	19123	-25441	CHIEF , LILLY
27.0	103.0	occupied	19506	-25176	CHIEF , NEPHI
28.0	104.0	occupied	19144	-25521	CHIEF , PAUL
45.0	110.0	occupied	30200	-27907	ESTILLY , CALVIN
47.2	111.0	occupied	30148	-27958	ESTILLY , LESLIE
47.0	112.0	occupied	30216	-27922	ESTILLY , LESLIE
46.0	113.0	occupied	22247	-33065	ESTILLY , LAURA
110.0	114.0	occupied	22387	-32954	YAZZIE , LINDA
99.0	115.0	occupied	17101	-32252	SMITH , FRED
99.2	116.0	occupied	17181	-32658	SMITH , FRED
99.1	117.0	occupied	17302	-32618	SMITH , FRED
20.0	118.0	occupied	20263	-36216	BLACKHAT , NELSON
98.0	119.0	occupied	19498	-36976	SMITH , BESSIE
14.0	120.0	occupied	29129	-33838	BEGAY , ELSIE (MERTIN)
18.1	121.0	occupied	29025	-33950	BENALLY , DANIEL/MABEL
18.0	122.0	occupied	29068	-33962	BENALLY , DANIEL/MABEL
68.0	123.0	occupied	36126	-33616	LAKE , DZANH
92.0	124.0	occupied	36254	-33426	SAVAGE , LINDA
74.0	0.0	occupied	37327	-31145	LAKE , SAM
18.3	126.0	occupied	28133	-38685	BENALLY , DANIEL/MABEL
65.3	127.0	occupied	31271	-39701	LAKE , ATEB
62.0	129.0	occupied	37338	-45389	KESCOLI , EARL/ANCITA
70.0	132.0	occupied	36314	-46098	LAKE , MARY
71.1	133.0	occupied	36495	-46170	LAKE , MARY
72.0	134.0	occupied	36443	-46276	LAKE , CLARENCE (MILTON)
21.0	137.0	occupied	21568	-48444	BOYD , MARY
78.0	139.0	occupied	32238	-54407	LITTLE , BEN/IDA
81.0	140.0	occupied	32223	-54464	LITTLE , SAM/ELIA
21.1	141.0	occupied	33931	-55862	BOYD , MARY
93.0	143.0	occupied	35519	-32618	SAVAGE , SARAH
66.1	144.0	occupied	35556	-32547	LAKE , CINDY
94.0	145.0	occupied	39208	-51331	SCHMITT , HENRY
76.1	147.0	occupied	20928	-49507	LEONARD , EUGENE
76.0	148.0	occupied	20933	-49463	LEONARD , EUGENE
60.0	149.0	occupied	66658	-25391	KEE , CHARIE/SARAH
5.0	150.0	occupied	36749	-15670	BAHE , JOHN
109.0	152.0	occupied	18712	-10743	YAZZIE , JAMES
83.0	153.0	occupied	18448	-11590	LUNA , BESSIE
104.0	154.1	occupied	36542	-23296	VANDEVER , ELSIE

2004	PREVIOUS	STATUS	NAME	NUMBER	NUMBER	2004
104.1	154.2	occupied	VANDEVER , ELSIE	104.1	154.2	-23321
8.3	155.0	occupied	BEGAY , BESSIE	8.3	155.0	-23479
11.1	156.0	occupied	BEGAY , EDITH	11.1	156.0	-21484
102.2	157.0	occupied	TSO , ROY/ALICE	102.2	157.0	-21470
73.0	159.0	occupied	LAKE , MOLITA	73.0	159.0	-31411
54.0	162.0	occupied	HONIE , LEONARD/MARIE	54.0	162.0	-43493
97.0	164.0	occupied	SMITH , AMBROSE	97.0	164.0	-36257
57.1	165.0	occupied	JOHNSON , MILTON/LILY	57.1	165.0	-14111
35.0	166.0	occupied	CRANK , HARRISON	35.0	166.0	-14631
79.0	168.0	occupied	LITTLE , AMY	79.0	168.0	-13905
112.6	169.0	occupied	YAZZIE , ROSE	112.6	169.0	-14310
40.0	170.1	occupied	CRANK , ROBERT/LINDA	40.0	170.1	-15959
40.1	170.2	occupied	CRANK , ROBERT/LINDA	40.1	170.2	-15960
42.0	171.0	occupied	CRANK , THOMAS	42.0	171.0	-15680
52.1	0.0	occupied	GILMORE , MARY	52.1	0.0	-50099
82.0	174.0	occupied	LUERKIN , WAYNE/MARTHA	82.0	174.0	-52019
15.0	175.0	occupied	BEGAY , PHILLIP	15.0	175.0	-52120
13.0	176.0	occupied	BEGAY , LEO	13.0	176.0	-52078
105.0	178.0	occupied	VANDEVER , LORRAINE	105.0	178.0	-46180
67.1	180.2	occupied	LAKE , MILTON (CLARENCE)	67.1	180.2	-46380
6.0	181.1	occupied	BECENTI , IRENE/KEVIN	6.0	181.1	-14807
6.1	181.2	occupied	BECENTI , IRENE/KEVIN	6.1	181.2	-14879
7.3	184.0	occupied	BEGAY , HARVEY (BAH)	7.3	184.0	-34868
16.0	185.0	occupied	BEGAY , RAYMOND	16.0	185.0	-38612
54.1	186.0	occupied	HONIE , LEONARD/MARIE	54.1	186.0	-39264
7.2	187.0	occupied	BEGAY , BAH	7.2	187.0	-38947
7.1	188.0	occupied	BEGAY , BAH	7.1	188.0	-40394
41.0	190.0	occupied	CRANK , SIMON	41.0	190.0	-18593
41.2	192.0	occupied	CRANK , SIMON	41.2	192.0	-16278
41.1	193.0	occupied	CRANK , SIMON	41.1	193.0	-16136
39.0	194.0	occupied	CRANK , MICHAEL/NATASHA	39.0	194.0	-15756
43.0	195.0	occupied	CRANK JR. , SIMON/TABBY	43.0	195.0	-15164
36.0	196.0	occupied	CRANK , JOHNSTON	36.0	196.0	-13883
77.0	197.0	occupied	LITTLE , JIMMIE/TERESA	77.0	197.0	-13890
58.1	198.0	occupied	JOHNSON , PAUL/THELMA	58.1	198.0	-15464
44.0	200.0	occupied	CRANK , BEN	44.0	200.0	-13908
1.1	203.0	occupied	ALBERT , ALTA R.	1.1	203.0	-14862
18.2	204.0	occupied	BENALTY , DANIEL/MABEL	18.2	204.0	-34526
17.0	205.0	occupied	BEGAY , TEDDY	17.0	205.0	-52016
107.4	207.0	occupied	YAZZIE , ALICE	107.4	207.0	4195
106.0	301.0	occupied	WILLIAMS , GEORGE/LETA	106.0	301.0	7012
103.0	302.0	occupied	TOSIE , STANLEY/CONNIE	103.0	302.0	6751
4.0	303.0	occupied	AUSTIN SR. , BILLY	4.0	303.0	8800
100.0	305.0	occupied	SNEDDY , LOCITA	100.0	305.0	2346
19.0	306.0	occupied	BENALTY , LUCILLE B.	19.0	306.0	-53875
108.0	307.0	occupied	YAZZIE , ARLENE	108.0	307.0	-51800
63.3	308.0	occupied	KESCOLI , MAXINE	63.3	308.0	-52480
52.0	310.0	occupied	GILMORE , MARY	52.0	310.0	-56000
85.0	311.0	occupied	MANSON , SALLY	85.0	311.0	-32825
84.0	312.0	occupied	MANSON , ANNA	84.0	312.0	-33000
58.0	316.0	occupied	JOHNSON , PAUL/THELMA	58.0	316.0	-15980
34.0	317.0	occupied	CRANK , ELI	34.0	317.0	-13570
7.0	318.0	occupied	BEGAY , BAH	7.0	318.0	-40380

2004
 EASTING
 NORTHING
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2004	PREVIOUS	NUMBER	STATUS	EASTING	NORTHING
BEGAY , TEDDY	17.3	319.0	occupied	29900	-62800
FREEMAN , IRENE	51.1	0.0	occupied	11480	-17868
LAKE , CINDY	66.0	321.0	occupied	35589	-32524
BEGAY , EDITH	11.0	322.0	occupied	44856	-21442
ANDERSON , WOODY	3.0	323.0	occupied	44900	-21378
BEGAY , TEDDY	17.4	324.0	occupied	29880	-62850
BEGAY , TEDDY	17.2	325.0	occupied	29900	-62875
BEGAY , TEDDY	17.1	326.0	occupied	30050	-63200
UNKNOWN ,	300.0	327.0	occupied	30000	-63200
UNKNOWN ,	300.1	328.0	occupied	29960	-63210
UNKNOWN ,	300.2	329.0	occupied	29890	-63240
UNKNOWN ,	300.3	330.0	occupied	29940	-63400
KESCOLI , MAXINE	63.0	308.0	occupied	61993	-56507
CODY , TOMMY	30.0	0.0	occupied	45823	-1217
CODY , MYRATA	29.1	208.0	occupied	50731	1221
CHIEF , BILL/SALLY	24.1	0.0	occupied	59441	-10864
YAZZIE , ROSE	112.2	0.0	occupied	59408	-10970
CHARLEY , ALFERD	22.0	0.0	occupied	77283	-31708
JOHNSON , GRACE	56.0	0.0	occupied	59358	-14609
HERRERA , ANNIE	53.2	151.0	occupied	18521	-10092
HERRERA , ANNIE	53.3	0.0	occupied	18719	-10290
LAKE , JOE	69.0	125.0	occupied	37063	-31361
BEGAY , BESSIE	8.0	0.0	occupied	36343	-23479
BEGAY , BESSIE	8.1	0.0	occupied	36216	-23368
BEGAY , BESSIE	8.2	0.0	occupied	36216	-23368
ESTILLY , LESLIE	47.1	0.0	occupied	37260	-10234
JOHNSON , SPENCER	59.0	0.0	occupied	60763	-15145
CODY , MYRATA	29.0	0.0	occupied	50673	1356
KESCOLI , MAXINE	63.2	0.0	occupied	67599	-47101
LANE , RONALD/THELMA	75.0	0.0	occupied	58454	-15120
PULINOS , GEORGE/MAE	88.0	0.0	occupied	61622	-51465
LEONARD , LILLY	114.0	0.0	occupied	13432	13230
LEONARD , FANNIE	125.0	0.0	occupied	13471	13314
HARVEY , LEMAN/JEAN	121.0	0.0	occupied	16397	14471
OLSON , ROBERT	115.0	0.0	occupied	16189	18208
YAZZIE , JAMES	109.1	0.0	occupied	28980	7615
AUSTIN , BILLY	117.0	0.0	occupied	31858	10818
FREEMAN , IRENE	51.2	0.0	occupied	12336	-21247
EDSITLY , LAURA	120.0	0.0	occupied	19197	-25326
ALBERT , OLIVER	118.0	0.0	occupied	17910	-10990
BLACKROCK , STEVEN/HELENA	119.0	0.0	occupied	17895	-9941
LUNA , BESSIE	83.2	0.0	occupied	16306	-7885
JAMES , JOE	113.0	0.0	occupied	20790	-50758
BEGAY , KEE Z.	116.0	0.0	occupied	20031	-55229
LAKE , CLARENCE	72.1	180.3	occupied	36475	-46337
MANYMULES , DAUGHTER	123.0	0.0	occupied	36501	-46462
SEGAY , LAVONNE	124.0	0.0	occupied	36411	-46582
JOHNSON JR. , PAUL	122.0	0.0	occupied	60309	-15592
BEGAY , LENORA	127.0	0.0	occupied	69786	-44063
BEGAY , HARVEY	7.4	0.0	occupied	78023	-34780
YAZZIE JR. , SILAS	128.0	0.0	occupied	77919	-26047
CHARLEY , EDISON	126.0	0.0	occupied	78056	-31499
CHARLEY , ARDAN	132.0	0.0	occupied	77968	-31587

2004	NUMBER	PREVIOUS	NUMBER	STATUS	EASTING	NORTHING	NAME
	23.2	0.0	0.0	occupied	78064	-31595	CHARLEY, KATIE
	131.0	0.0	0.0	occupied	78926	-38850	BEGAY, RAYTHANIEL
	130.0	0.0	0.0	occupied	77456	-39421	BEGAY, JOHN D.
	8.4	0.0	0.0	occupied	32122	-24673	BEGAY, BESSIE
	69.1	0.0	0.0	occupied	36468	-32584	LAKE, JOE
	49.1	0.0	0.0	occupied	38365	-9703	ETSITLY, STEVEN/IRENE
	133.0	0.0	0.0	occupied	43835	-8652	BEGAY, EDWARD
	95.1	0.0	0.0	occupied	53764	-14702	SEATON, EVELYN
	129.0	0.0	0.0	occupied	53098	-14196	JOHNSON, BERT
	32.0	0.0	0.0	occupied	20586	-15874	CRANK, ALBERT
	34.1	0.0	0.0	occupied	52887	-14411	CRANK, ELI
	58.2	0.0	0.0	occupied	59858	-11129	JOHNSON, PAUL/THELMA
	63.4	0.0	0.0	occupied	67623	-46949	CHURCH
	31.1	0.0	0.0	occupied	50112	2609	CODY SR., JAMES
	0.0	61.2	201.0	Vacated	52827	-14705	CRANK, LILLY
	0.0	201.0	320.0	Vacated	52797	-14670	PARRISH, BESSIE
	0.0	320.0	180.1	Vacated	36686	-46380	LAKE, CIARENCE
	0.0	69.0	311.03	Relocated	31103	-3923	CODY, MYRATA
	0.0	68.0	311.53	Relocated	31153	-3790	CODY, SR JAMES
	0.0	67.0	310.55	Relocated	31055	-3791	CODY, SR JAMES
	0.0	304.0	399.00	Relocated	39900	-7650	CODY, SR JAMES
	0.0	28.0	541.71	Relocated	54171	-42132	LAKE, ATEED
	0.0	29.0	541.81	Relocated	54181	-42078	LAKE, ATEED
	0.0	313.0	542.00	Relocated	54200	-42100	LAKE, ESTHER
	0.0	33.0	581.36	Relocated	58136	-39177	LAKE, ATEED
	0.0	314.0	603.00	Relocated	60300	-40850	LAKE, ATEED
	0.0	183.0	669.03	Relocated	66903	-44865	BEGAY, BAH
	0.0	173.0	673.41	Proposed	67341	-48813	KESCOLI, MAXINE
	0.0	315.0	662.00	Relocated	66200	-40900	BEGAY, BAH
	0.0	39.0	666.98	Relocated	66698	-41050	WHITEHAIR, OSCAR/ZONNIE
	0.0	21.0	640.51	Relocated	64051	-45273	GILMORE, MARY
	0.0	22.0	641.54	Relocated	64154	-45301	GILMORE, MARY
	0.0	23.0	641.62	Relocated	64162	-45122	KESCOLI, MAXINE
	0.0	25.0	642.40	Relocated	64240	-45096	KESCOLI, MAXINE
	0.0	26.0	643.02	Relocated	64302	-45028	BEGAY, KEE JOHN